



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2019-0241; FRL-10003-99-Region 9]

Approval of Air Quality Implementation Plans; California; Coachella Valley; 2008 8-Hour Ozone Nonattainment Area Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve, or conditionally approve, all or portions of two state implementation plan (SIP) revisions submitted by the State of California to meet Clean Air Act requirements for the 2008 8-hour ozone national ambient air quality standards (NAAQS or “standards”) in the Coachella Valley ozone nonattainment area (“Coachella Valley”). The two SIP revisions include the portions of the “Final 2016 Air Quality Management Plan” and the “2018 Updates to the California State Implementation Plan” that address ozone in the Coachella Valley. These submittals address the nonattainment area requirements for the 2008 8-hour ozone NAAQS, including the requirements for an emissions inventory, emissions statements, attainment demonstration, reasonable further progress (RFP), reasonably available control measures, contingency measures, and motor vehicle emissions budgets. The EPA is proposing to approve these submittals as meeting all the applicable ozone nonattainment area requirements except for the contingency measure requirements, for which the EPA is proposing to conditionally approve the RFP contingency measures and to defer action on the attainment contingency measure.

DATES: Any comments must be submitted by [**Insert date 30 days from the date of publication in the *Federal Register***].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R09-OAR-2019-0241 at <https://www.regulations.gov>. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: John Ungvarsky, Air Planning Office (AIR-2), EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 972-3963, or by email at ungvarsky.john@epa.gov.

SUPPLEMENTAL INFORMATION: Throughout this document, “we,” “us” and “our” refer to the EPA.

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I. Regulatory Context

A. Ozone Standards, Area Designations and SIPs

Ground-level ozone pollution is formed from the reaction of volatile organic compounds (VOC) and oxides of nitrogen (NO_x) in the presence of sunlight.¹ These two pollutants, referred to as ozone precursors, are emitted by many types of sources, including on- and off-road motor vehicles and engines, power plants and industrial facilities, and smaller area sources such as lawn and garden equipment and paints.

Scientific evidence indicates that adverse public health effects occur following exposure to ozone, particularly in children and adults with lung disease. Breathing air containing ozone

¹ The State of California refers to reactive organic gases (ROG) in some of its ozone-related SIP submissions. As a practical matter, ROG and VOC refer to the same set of chemical constituents, and for the sake of simplicity, we refer to this set of gases as VOC in this proposed rule.

can reduce lung function and inflame airways, which can increase respiratory symptoms and aggravate asthma or other lung diseases.²

Under section 109 of the Clean Air Act (CAA or “the Act”), the EPA promulgates NAAQS for pervasive air pollutants, such as ozone. The NAAQS are concentration levels that the attainment and maintenance of which the EPA has determined to be requisite to protect public health and welfare. Following promulgation of a new or revised NAAQS, the EPA is required by the CAA to designate areas throughout the nation as either attaining or not attaining the standards.

On February 8, 1979, under section 109 of the CAA, the EPA established primary and secondary NAAQS for ozone at 0.12 parts per million (ppm) averaged over a 1-hour period.³ On July 18, 1997, the EPA revised the primary and secondary standards for ozone to set the acceptable level of ozone in the ambient air at 0.08 ppm averaged over an 8-hour period (“1997 ozone NAAQS”).⁴

In 2008, the EPA lowered the 8-hour ozone NAAQS to 0.075 ppm (“2008 ozone NAAQS”) to replace the 1997 ozone NAAQS of 0.08 ppm.⁵ In 2012, the EPA designated the Coachella Valley as nonattainment for the 2008 ozone NAAQS and classified the area as

² “Fact Sheet – 2008 Final Revisions to the National Ambient Air Quality Standards for Ozone,” dated March 2008.

³ See 44 FR 8202.

⁴ See 62 FR 38856. On April 30, 2004, the EPA designated and classified areas of the country with respect to the 1997 ozone NAAQS. See 69 FR 23858. On July 10, 2019, the EPA granted a request from the State of California to reclassify the Coachella Valley ozone nonattainment area from “Severe-15” to “Extreme” for the 1997 ozone NAAQS. See 84 FR 32841.

⁵ 73 FR 16436 (March 27, 2008). The EPA further tightened the 8-hour ozone NAAQS to 0.070 ppm in 2015, but this proposed action relates to the requirements for the 2008 ozone NAAQS. Information on the 2015 ozone NAAQS is available at 80 FR 65292 (October 26, 2015).

“Severe-15.”⁶ Areas classified as Severe-15 must attain the NAAQS within 15 years of the effective date of the nonattainment designation.⁷

Designations of nonattainment for a given NAAQS trigger requirements under the CAA to prepare and submit SIP revisions. The SIP revisions that are the subject of today’s proposed action address the Severe-15 nonattainment area requirements that apply to the Coachella Valley for the 2008 ozone NAAQS.

Under California law, the California Air Resources Board (CARB) is the state agency that is responsible for the adoption and submission to the EPA of California SIPs and SIP revisions, and it has broad authority to establish emissions standards and other requirements for mobile sources. Local and regional air pollution control districts in California are responsible for the regulation of stationary sources and are generally responsible for the development of regional air quality management plans (AQMPs or “plans”). In the Coachella Valley, the South Coast Air Quality Management District (SCAQMD or “District”) develops and adopts AQMPs to address CAA planning requirements applicable to that region. Such plans are then submitted to CARB for adoption and submittal to the EPA as revisions to the California SIP.

B. The Coachella Valley 2008 Ozone Nonattainment Area

The Coachella Valley is located within Riverside County, and its boundaries generally align with the Riverside County portion of the Salton Sea Air Basin (SSAB). For a precise description of the geographic boundaries of the Coachella Valley, see 40 CFR 81.305.

Prior AQMPs and state control measures developed by the District and CARB have produced significant emissions reductions over the years and improved air quality in the Coachella Valley. For instance, the 8-hour ozone design value for the Coachella Valley

⁶ 77 FR 30088 (May 21, 2012).

⁷ CAA section 181(a)(1), 40 CFR 51.1102 and 51.1103(a).

decreased from 0.110 ppm to 0.088 ppm from 1995 to 2015, despite increases in population and vehicular activity.⁸

The Coachella Valley is downwind from the South Coast Air Basin (“South Coast”) and is subject to significant transport of ozone from that area; both ozone nonattainment areas are regulated by the SCAQMD. The Final 2016 Air Quality Management Plan describes ozone transport from the South Coast as follows:

Atmospheric ozone in the Riverside county portion of the SSAB is both directly transported from the Basin and formed photochemically from precursors emitted upwind. The precursors are emitted in greatest quantity in the coastal and central Los Angeles County areas of the Basin. The Basin’s prevailing sea breeze causes polluted air to be transported inland. As the air is being transported inland, ozone is formed, with peak concentrations occurring in the inland valleys of the Basin, extending from eastern San Fernando Valley through the San Gabriel Valley into the Riverside-San Bernardino area and the adjacent mountains. As the air is transported still further inland into the Coachella Valley through the San Gorgonio Pass, ozone concentrations typically decrease due to dilution, although ozone standards can still be exceeded.⁹

Because of the transport from the South Coast into the Coachella Valley, continued progress in the South Coast towards meeting the 1997 and 2008 ozone NAAQS is critical for the Coachella Valley to attain the 2008 ozone NAAQS.

C. Clean Air Act and Regulatory Requirements for 2008 Ozone Nonattainment Area SIPs

States must implement the 2008 ozone NAAQS under title I, part D of the CAA, including sections 171–179B of subpart 1 (“Nonattainment Areas in General”) and sections 181–185 of subpart 2 (“Additional Provisions for Ozone Nonattainment Areas”). To assist states in developing effective plans to address ozone nonattainment problems, in 2015, the EPA issued a

⁸ 2016 AQMP, Appendix II (“Current Air Quality”), Table A-8. For the 8-hour ozone NAAQS, the design value at any given monitoring site is the 3-year average of the annual fourth highest daily maximum 8-hour average ambient air quality ozone concentration. The maximum design value among the various ozone monitoring sites is the design value for the area.

⁹ “Final 2016 Air Quality Management Plan,” SCAQMD, March 2017, 7-9. See also 2007 AQMP, 7-23 (describing ozone transport through the San Gorgonio Pass and citing early studies documenting this transport).

SIP Requirements Rule (SRR) for the 2008 ozone NAAQS (“2008 Ozone SRR”) that addressed implementation of the 2008 standards, including attainment dates, requirements for emissions inventories, attainment and reasonable further progress (RFP) demonstrations, among other SIP elements, as well as the transition from the 1997 ozone NAAQS to the 2008 ozone NAAQS and associated anti-backsliding requirements.¹⁰ The regulatory requirements of the 2008 Ozone SRR are codified at 40 CFR part 51, subpart AA. We discuss the CAA and regulatory planning requirements for the elements of 2008 ozone plans relevant to this proposal in more detail below.

The EPA’s 2008 Ozone SRR was challenged, and on February 16, 2018, the U.S. Court of Appeals for the D.C. Circuit (“D.C. Circuit”) published its decision in *South Coast Air Quality Management District v. EPA* (“*South Coast II*”)¹¹ vacating portions of the 2008 Ozone SRR. The only aspect of the *South Coast II* decision that affects this proposed action is the vacatur of the alternative baseline year for RFP. More specifically, the 2008 Ozone SRR required states to develop the baseline emissions inventory for RFP using the emissions for the most recent calendar year for which states submit a triennial inventory to the EPA under subpart A (“Air Emissions Reporting Requirements”) of 40 CFR part 51, which was 2011. However, the 2008 Ozone SRR allowed states to use an alternative year, between 2008 and 2012, for the baseline emissions inventory provided that the state demonstrated why the alternative baseline year was appropriate. In the *South Coast II* decision, the D.C. Circuit vacated the provisions of the 2008 Ozone SRR that allowed states to use an alternative baseline year for demonstrating RFP.

¹⁰ 80 FR 12264 (March 6, 2015). Anti-backsliding requirements are the provisions applicable to revoked NAAQS (including the 1979 1-hour ozone NAAQS and the 1997 ozone NAAQS) as described in CAA section 172(e).

¹¹ *South Coast Air Quality Management District v. EPA*, 882 F.3d 1138 (D.C. Cir. 2018). The term “*South Coast II*” is used in reference to the 2018 court decision to distinguish it from a decision published in 2006 also referred to as “*South Coast*.” The earlier decision involved a challenge to the EPA’s Phase 1 implementation rule for the 1997 ozone NAAQS. *South Coast Air Quality Management Dist. v. EPA*, 472 F.3d 882 (D.C. Cir. 2006).

II. Submissions from the State of California to Address 2008 Ozone Requirements in the Coachella Valley

A. Summary of Submissions

In this document, we are proposing action on portions of two SIP revisions that are described in detail in the following paragraphs. Collectively, we refer to the relevant portions of the two SIP revisions as the “2016 Coachella Valley Ozone SIP.”

1. SCAQMD’s 2016 Air Quality Management Plan

On April 27, 2017, CARB submitted the Final 2016 Air Quality Management Plan (March 2017) (“2016 AQMP”) to the EPA as a revision to the California SIP.¹² The 2016 AQMP addresses the nonattainment area requirements for the South Coast for the 2008 8-hour ozone NAAQS, the 2006 fine particulate matter (PM_{2.5}) NAAQS, and the 2012 PM_{2.5} NAAQS, and for the Coachella Valley for the 2008 8-hour ozone NAAQS. It also updates the approved attainment demonstrations for the 1979 1-hour ozone NAAQS and 1997 8-hour ozone NAAQS for the South Coast and adds new measures to reduce the reliance on section 182(e)(5) new technology measures to attain those standards. On October 1, 2019, the EPA approved portions of the 2016 AQMP and other submittals (collectively referred to as the “2016 South Coast Ozone SIP”)¹³ with respect to numerous requirements for the South Coast relating to the 1979 1-hour, 1997 8-

¹² Letter dated April 27, 2017, from Richard Corey, Executive Officer, CARB, to Alexis Strauss, Acting Regional Administrator, EPA Region IX.

¹³ The 2016 South Coast Ozone SIP includes five submittals: the 2016 AQMP, the “Revised Proposed 2016 State Strategy for the State Implementation Plan,” the “2018 Updates to the California State Implementation Plan,” the “Updated Federal 1979 1-Hour Ozone Standard Attainment Demonstration,” and a SCAQMD emissions statement rule.

hour, and 2008 8-hour ozone NAAQS.¹⁴ In today's notice, we are proposing action on the portions of the 2016 AQMP that address the 2008 ozone NAAQS for the Coachella Valley.

The SIP revision for the 2016 AQMP includes the various chapters and appendices of the 2016 AQMP, described further below, plus the District's resolution of adoption for the plan (District Resolution 17-2) and CARB's resolution of adoption of the 2016 AQMP as a revision to the California SIP (CARB Resolution 17-8) that includes commitments on which the 2016 AQMP relies.¹⁵ With respect to ozone, the 2016 AQMP addresses the CAA requirements for emissions inventories, air quality modeling demonstrating attainment, reasonably available control measures (RACM), RFP, transportation control strategies and measures, and contingency measures for failure to make RFP, among other requirements.

The 2016 AQMP is organized into eleven chapters. Most of the 2016 AQMP is directly relevant to the ozone and PM_{2.5} NAAQS in the South Coast, and our review for this action addresses only those portions of the 2016 AQMP that address the 2008 ozone NAAQS for the Coachella Valley.¹⁶ The Coachella Valley is located in the SSAB, which is separate from the upwind South Coast and faces different air quality challenges. Chapter 7, "Current and Future

¹⁴ 84 FR 52005. The EPA's proposed approval of the 2016 South Coast Ozone SIP is at 84 FR 28132 (June 17, 2019). On February 12, 2019, we approved portions of the 2016 AQMP with respect to the 2006 PM_{2.5} NAAQS (except for the related contingency measure element). See 84 FR 3305.

¹⁵ SCAQMD Board Resolution 17-2, March 3, 2017; CARB Board Resolution 17-8, 2016 Air Quality Management Plan for Ozone and PM_{2.5} in the South Coast and the Coachella Valley, March 23, 2017.

¹⁶ The following chapters or portions thereof in the 2016 AQMP were submitted for information only and are not subject to review as part of the SIP revision: the portion of Chapter 6 that is titled "California Clean Air Act Requirements" and that discusses compliance with state law requirements for clean air plans; Chapter 8, "Looking Beyond Current Requirements," assesses the South Coast's status with respect to the 2015 8-hour ozone standard of 0.070 ppm; Chapter 9, "Air Toxic Control Strategy," examines the ongoing efforts to reduce health risk from toxic air contaminants, co-benefits from reducing criteria pollutants, and potential future actions; and Chapter 10, "Climate and Energy," provides a description of current and projected energy demand and supply issues in the South Coast, and the relationship between air quality improvement and greenhouse gas mitigation goals. As noted previously, we are not taking action in this rulemaking on the portions of the 2016 AQMP that relate only to the South Coast.

Air Quality – Desert Nonattainment Areas SIP” of the 2016 AQMP addresses CAA requirements for the 2008 ozone NAAQS in the Coachella Valley.

Additional chapters in the 2016 AQMP also discuss the Coachella Valley and provide relevant background. Chapter 1, “Introduction,” introduces the 2016 AQMP, including its purpose, historical air quality progress in the South Coast and Coachella Valley, and the District’s approach to air quality planning. Chapter 2, “Air Quality and Health Effects,” discusses current air quality in comparison with federal health-based air pollution standards. Chapter 4, “Control Strategy and Implementation,” presents the control strategy, specific measures, and implementation schedules to attain the air quality standards by the specified attainment dates. Chapter 5, “Future Air Quality,” describes the modeling and modeled attainment demonstration. Chapter 6, “Federal and State Clean Air Act Requirements,” discusses specific federal and state requirements, including anti-backsliding requirements for revoked standards. Chapter 11, “Public Process and Participation,” describes the District’s public outreach effort associated with the development of the 2016 AQMP. A glossary is provided at the end of the document, presenting definitions of commonly used terms found in the 2016 AQMP.

The 2016 AQMP also includes the following technical appendices:

- Appendix I (“Health Effects”) presents a summary of scientific findings on the health effects of ambient air pollutants.
- Appendix II (“Current Air Quality”) contains a detailed summary of the air quality in 2015, along with prior year trends, in both the South Coast and the Coachella Valley.
- Appendix III (“Base and Future Year Emission Inventory”) presents the 2012 base year emissions inventory and projected emission inventories of air pollutants in future

attainment years for both annual average and summer planning inventories in the South Coast.

- Appendix IV-A (“SCAQMD’s Stationary and Mobile Source Control Measures”) describes SCAQMD’s proposed stationary and mobile source control measures to attain the federal ozone and PM_{2.5} standards.
- Appendix IV-B (“CARB’s Mobile Source Strategy”) describes CARB’s proposed 2016 strategy to attain health-based federal air quality standards.
- Appendix IV-C (“Regional Transportation Strategy and Control Measures”) describes the Southern California Association of Governments’ (SCAG) “Final 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy” (2016 RTP/SCS) and transportation control measures.
- Appendix V (“Modeling and Attainment Demonstrations”) provides the details of the regional modeling for the attainment demonstration.
- Appendix VI (“Compliance with Other Clean Air Act Requirements”) provides the District’s demonstration that the 2016 AQMP complies with specific CAA requirements.

Attainment of the 2008 ozone NAAQS in the Coachella Valley is heavily dependent on emission reductions occurring in the adjacent South Coast. The emission reductions in the South Coast are described in the 2016 South Coast Ozone SIP. As discussed in section III.D (Attainment Demonstration) of the EPA’s proposed approval of the 2016 South Coast Ozone SIP,¹⁷ the ozone attainment demonstrations for the 1997 and 2008 ozone NAAQS include commitments made by the District in the 2016 AQMP and by CARB in the “Revised Proposed

¹⁷ 84 FR 28132 (June 17, 2019). On October 1, 2019, the EPA finalized its approval of the 2016 South Coast Ozone SIP. See 84 FR 52005.

2016 State Strategy for the State Implementation Plan” (March 7, 2017) (“2016 State Strategy”).

The 2016 State Strategy does not include specific commitments for the Coachella Valley. For details on the District and CARB emissions reduction commitments in the 2016 South Coast Ozone SIP, see the EPA’s June 17, 2019 proposed approval action at 84 FR 28132.

2. CARB’s 2018 Updates to the California State Implementation Plan

On December 5, 2018, CARB submitted the 2018 Updates to the California State Implementation Plan (“2018 SIP Update”) to the EPA as a revision to the California SIP.¹⁸

CARB adopted the 2018 SIP Update on October 25, 2018. CARB developed the 2018 SIP Update in response to the court’s decision in *South Coast II* vacating the 2008 Ozone SRR with respect to the use of an alternate baseline year for demonstrating RFP, and to address contingency measure requirements in the wake of the court decision in *Bahr v. EPA*.¹⁹ The 2018 SIP Update includes updates for 8 different California ozone nonattainment areas. We previously approved the San Joaquin Valley and South Coast portions of the 2018 SIP Update.²⁰ The 2018 SIP Update includes an RFP demonstration using the required 2011 baseline year for the Coachella Valley for the 2008 ozone NAAQS.²¹

The 2018 SIP Update also includes updated motor vehicle emissions budgets and information to support the contingency measure element. To supplement the contingency measures element of the 2016 Coachella Valley Ozone SIP, the District has committed by letter

¹⁸ Letter dated December 5, 2018, from Richard Corey, Executive Officer, CARB, to Mike Stoker, Regional Administrator, EPA Region IX.

¹⁹ *Bahr v. EPA*, 836 F.3d 1218 (9th Cir. 2016). In this case, the court rejected the EPA’s longstanding interpretation of CAA section 172(c)(9) as allowing for early implementation of contingency measures. The court concluded that a contingency measure must take effect at the time the area fails to make RFP or attain by the applicable attainment date, not before.

²⁰ 84 FR 11198 (March 25, 2019) (final approval of the San Joaquin Valley portion of the 2018 SIP Update) and 84 FR 52005 (October 1, 2019) (final approval of the South Coast portion of the 2018 SIP Update).

²¹ Because we understand the State intended the RFP demonstration for the Coachella Valley in the 2018 SIP Update to replace the prior RFP demonstration in the 2016 AQMP submitted in April 2017, we plan no further action on the RFP demonstration for Coachella Valley in the 2016 AQMP.

to modify an existing rule or adopt a new rule to create a contingency measure that will be triggered if the area fails to meet an RFP milestone or attain the 2008 ozone NAAQS.²² CARB transmitted the District's letter to the EPA and committed to submit the revised District rule to the EPA as a SIP revision within 12 months of the EPA's final action on the contingency measure element of the 2016 Coachella Valley Ozone SIP.²³

B. Clean Air Act Procedural Requirements for Adoption and Submission of SIP Revisions

CAA sections 110(a) and 110(l) require a state to provide reasonable public notice and opportunity for public hearing prior to the adoption and submission of a SIP or SIP revision. To meet this requirement, every SIP submittal should include evidence that adequate public notice was given and an opportunity for a public hearing was provided consistent with the EPA's implementing regulations in 40 CFR 51.102.

Both the District and CARB have satisfied the applicable statutory and regulatory requirements for reasonable public notice and hearing prior to the adoption and submittal of the SIP revisions that compose the 2016 Coachella Valley Ozone SIP. With respect to the 2016 AQMP, the District held six regional workshops from July 14 through July 21, 2016, and four regional hearings on November 15 and 17, 2016, to discuss the plan and solicit public input.²⁴ On December 19 and 20, 2016, the District published notices in several local newspapers of a public hearing to be held on February 3, 2017, for the adoption of the 2016 AQMP.²⁵ On February 3, 2017, the District held the public hearing, and on March 3, 2017, through Resolution

²² Letter dated August 2, 2019, from Wayne Nastri, SCAQMD Executive Officer, to Richard Corey, Executive Officer, CARB.

²³ Letter dated September 9, 2019, from Michael Benjamin, Chief, Air Quality and Science Division, CARB, to Amy Zimpfer, Associate Director, Air Division, EPA Region IX.

²⁴ See 2016 AQMP, Table 11-2.

²⁵ Memorandum dated January 24, 2017, from Denise Garzaro, Clerk of the Boards, SCAQMD to Arlene Martinez, Administrative Secretary, Planning, Rule Development and Area Sources, SCAQMD. The memorandum includes copies of the proofs of publication of the notice for the February 3, 2017 public hearing.

17-2, the District adopted the 2016 AQMP and directed the Executive Officer to forward the plan to CARB for inclusion in the California SIP.

CARB also provided public notice and opportunity for public comment on the 2016 AQMP. On March 6, 2017, CARB released for public review its Staff Report for the 2016 AQMP and published a notice of public meeting to be held on March 23, 2017, to consider adoption of the 2016 AQMP.²⁶ On March 23, 2017, CARB held the hearing and adopted the 2016 AQMP as a revision to the California SIP, excluding those portions not required to be submitted to the EPA, and directed the Executive Officer to submit the 2016 AQMP to the EPA for approval into the California SIP.²⁷ On April 27, 2017, the Executive Officer of CARB submitted the 2016 AQMP to the EPA and included the transcript of the hearing held on March 23, 2017.²⁸ On October 23, 2017, the EPA determined that the portions of this submittal applicable to the 2008 ozone NAAQS were complete.²⁹

With respect to the 2018 SIP Update, CARB also provided public notice and opportunity for public comment. On September 21, 2018, CARB released for public review the 2018 SIP Update and published notice of a public meeting to be held on October 23, 2018, to consider adoption of the 2018 SIP Update.³⁰ On October 23, 2018, through Resolution 18-50, CARB adopted the 2018 SIP Update. On December 5, 2018, CARB submitted the 2018 SIP Update to the EPA.

²⁶ Notice of Public Meeting to Consider Adopting the 2016 Air Quality Management Plan for Ozone and PM_{2.5} for the South Coast Air Basin and the Coachella Valley signed by Richard Corey, Executive Officer, CARB, March 6, 2017.

²⁷ CARB Resolution 17-8, 10.

²⁸ Transcript of the March 23, 2017 Meeting of the State of California Air Resources Board.

²⁹ Letter dated October 23, 2017, from Matthew J. Lakin, Acting Director, Air Division, EPA Region IX to Richard Corey, Executive Officer, CARB.

³⁰ Notice of Public Meeting to Consider the 2018 Updates to the California State Implementation Plan signed by Richard Corey, Executive Officer, CARB, September 21, 2018.

Based on information provided in each of the SIP revisions summarized above, the EPA has determined that all hearings were properly noticed. Therefore, we find that the submittals of the 2016 AQMP and the 2018 SIP Update meet the procedural requirements for public notice and hearing in CAA sections 110(a) and 110(l) and 40 CFR 51.102.

III. Review of the 2016 Coachella Valley Ozone SIP

A. Emissions Inventories

1. Statutory and Regulatory Requirements

CAA sections 172(c)(3) and 182(a)(1) require states to submit for each ozone nonattainment area a “base year inventory” that is a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in the area. In addition, the 2008 Ozone SRR requires that the inventory year be selected consistent with the baseline year for the RFP demonstration, which is the most recent calendar year for which a complete triennial inventory is required to be submitted to the EPA under the Air Emissions Reporting Requirements.³¹

The EPA has issued guidance on the development of base year and future year emissions inventories for 8-hour ozone and other pollutants.³² Emissions inventories for ozone must include emissions of VOC and NO_x and represent emissions for a typical ozone season weekday.³³ States should include documentation explaining how the emissions data were

³¹ 2008 Ozone SRR at 40 CFR 51.1115(a) and the Air Emissions Reporting Requirements at 40 CFR part 51, subpart A.

³² “Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations,” EPA-454/B-17-002, May 2017. At the time the 2016 AQMP was developed, the following EPA emissions inventory guidance applied: “Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations” EPA-454-R-05-001, November 2005.

³³ 40 CFR 51.1115(a) and (c), and 40 CFR 51.1100(bb) and (cc).

calculated. In estimating mobile source emissions, states should use the latest emissions models and planning assumptions available at the time the SIP is developed.³⁴

Future baseline emissions inventories must reflect the most recent population, employment, travel and congestion estimates for the area. In this context, “baseline” emissions inventories refer to emissions estimates for a given year and area that reflect rules and regulations and other measures that are already adopted. Future baseline emissions inventories are necessary to show the projected effectiveness of SIP control measures. Both the base year and future year inventories are necessary for photochemical modeling to demonstrate attainment.

2. Summary of State’s Submission

The 2016 AQMP includes a summary of the base year (2012) and future year annual average baseline inventories for NO_x and VOC for the Coachella Valley. Documentation for the inventories is found in Chapter 7 and Appendix III of the 2016 AQMP. Additionally, the District provided the EPA with supplemental documentation (“2016 AQMP Inventory Supplement”) for the 2012 and 2026 ozone season inventories relied on in the 2016 AQMP.³⁵ The 2018 SIP Update provides detailed NO_x and VOC inventories for 2011 (the base year used for RFP) and 2012, and projected inventories for 2017, 2020, 2023, 2026, and 2027. Because ozone levels in the Coachella Valley are typically higher from May through October, the inventories in the 2016 AQMP Inventory Supplement and the 2018 SIP Update represent average summer day emissions. The inventories in the 2016 AQMP Inventory Supplement and 2018 SIP Update reflect District rules adopted prior to December 2015 and CARB rules adopted by November

³⁴ 80 FR 12264, 12290 (March 6, 2015).

³⁵ Email dated June 28, 2019, from Zorik Pirveysian, SCAQMD, to John Ungvarsky, EPA, Subject: “RE: Coachella Valley ozone inventory clarification and update on possible contingency measures.” The 2016 AQMP Inventory Supplement consists of two attachments to this email, which provide the detailed 2012 and 2026 ozone season inventories that were used for the summary in the 2016 AQMP. The inventories were generated on November 30, 2016.

2015. For estimating on-road motor vehicle emissions, these inventories use EMFAC2014, the EPA-approved version of California’s mobile source emissions model available at the time the 2016 AQMP and 2018 SIP Update were developed.³⁶

The VOC and NO_x emissions estimates are grouped into two general categories, stationary sources and mobile sources. Stationary sources are further divided into “point” and “area” sources. Point sources typically refer to permitted facilities and have one or more identified and fixed pieces of equipment and emissions points. Area sources consist of widespread and numerous smaller emissions sources, such as small permitted facilities and households. The mobile sources category is divided into two major subcategories, “on-road” and “off-road” mobile sources. On-road mobile sources include light-duty automobiles, light-, medium-, and heavy-duty trucks, and motorcycles. Off-road mobile sources include aircraft, locomotives, construction equipment, mobile equipment, and recreational vehicles.

Point source emissions for the 2012 base year emissions inventory are calculated using reported data from facilities using the District’s annual emissions reporting program, which applies under District Rule 301 (“Permitting and Associated Fees”) to stationary sources in the Coachella Valley that emit 4 tons per year (tpy) or more of VOC or NO_x. Area sources include smaller emissions sources distributed across the nonattainment area. CARB and the District estimate emissions for about 400 area source categories using established inventory methods, including publicly-available emissions factors and activity information. Activity data are derived

³⁶ EMFAC is short for EMISSION FACTOR. The EPA announced the availability of the EMFAC2014 model for use in state implementation plan development and transportation conformity in California on December 14, 2015. 80 FR 77337. The EPA’s approval of the EMFAC2014 emissions model for SIP and conformity purposes was effective on the date of publication of the notice in the *Federal Register*. On August 15, 2019, the EPA approved and announced the availability of EMFAC2017, the latest update to the EMFAC model for use by State and local governments to meet CAA requirements. See 84 FR 41717.

from national survey data such as the Energy Information Administration or from local sources such as the Southern California Gas Company, paint suppliers, and District databases. Emissions factors used for the estimates come from a number of sources including source tests, compliance reports, and the EPA's compilation of emissions factor document known as "AP-42."

On-road emissions inventories in the 2016 AQMP Inventory Supplement are calculated using CARB's EMFAC2014 model and the travel activity data provided by SCAG in the 2016 RTP/SCS.³⁷ CARB provided emissions inventories for off-road equipment, including construction and mining equipment, industrial and commercial equipment, lawn and garden equipment, agricultural equipment, ocean-going vessels, commercial harbor craft, locomotives, cargo handling equipment, pleasure craft, and recreational vehicles. CARB uses several models to estimate emissions for more than one hundred off-road equipment categories.³⁸ Aircraft emissions inventories are developed in conjunction with the airports in the region.

Table 1 provides a summary of the District's 2012 base year and 2026 attainment year baseline emissions estimates in tons per average summer day for NO_x and VOC. These inventories provide the basis for the control measure analysis and the attainment demonstrations in the 2016 AQMP. Based on the inventory for 2012, stationary and area sources currently account for 39 percent of the VOC emissions and less than 5 percent of the NO_x emissions in the Coachella Valley while mobile sources account for 61 percent of the VOC emissions and over 95 percent of the NO_x emissions. For a more detailed discussion of the methodologies used to develop the inventories, see Appendix III of the 2016 AQMP.

³⁷ See <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>. SCAG is the metropolitan planning organization for the Coachella Valley and surrounding areas. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles.

³⁸ 2016 AQMP, Appendix III, page III-1-24.

Table 1 – Coachella Valley Base Year and Attainment Year Baseline Emissions Inventories
(summer planning inventory, tons per day (tpd))

	2012		2026	
Category	NO_x	VOC	NO_x	VOC
Stationary and Area Sources	1.2	6.4	1.4	8.8
On-Road Mobile Sources	18.9	6.4	4.1	2.9
Off-Road Mobile Sources	6.5	3.7	3.6	3.3
Total	26.6	16.5	9.1	15.1

Sources: 2016 AQMP Inventory Supplement and 2018 SIP Update, Table VII-1. The sum of the emissions values may not equal the total due to rounding of the numbers.

Future emissions forecasts are primarily based on demographic and economic growth projections provided by SCAG, and control factors developed by the District in reference to the 2012 base year. Growth factors used to project these baseline inventories are derived mainly from data obtained from SCAG.³⁹

3. The EPA’s Review of the State’s Submission

We have reviewed the 2012 base year emissions inventory in the 2016 AQMP Inventory Supplement and the inventory methodologies used by the District and CARB for consistency with CAA requirements and EPA guidance. First, we find that the 2012 inventory includes estimates for VOC and NO_x for a typical ozone season weekday, and that CARB has provided adequate documentation explaining how the emissions are calculated. Second, we find that the 2012 base year emissions inventory in the 2016 AQMP Inventory Supplement reflects appropriate emissions models and methodologies, and, therefore, represents a comprehensive, accurate, and current inventory of actual emissions during that year in the Coachella Valley nonattainment area. Third, we find that selection of year 2012 for the base year emissions inventory is appropriate because it is consistent with the 2011 RFP baseline year (from the 2018 SIP Update) because both inventories are derived from a common set of models and methods.

³⁹ 2016 AQMP, 7-25, and Appendix III, page III-2-6.

Therefore, the EPA is proposing to approve the 2012 emissions inventory in the 2016 AQMP Inventory Supplement as meeting the requirements for a base year inventory set forth in CAA section 182(a)(1) and 40 CFR 51.1115.⁴⁰

With respect to the 2026 attainment year baseline projections, we have reviewed the growth and control factors and find them acceptable and conclude that the future baseline emissions projections in the 2016 AQMP Inventory Supplement reflect appropriate calculation methods and the latest planning assumptions. Also, as a general matter, the EPA will approve a SIP revision that takes emissions reduction credit for a control measure only where the EPA has approved the measure as part of the SIP. Thus, to take credit for the emissions reductions from newly-adopted or amended District rules for stationary sources, the related rules must be approved by the EPA into the SIP. Table 2 in the technical support document (TSD) accompanying this rulemaking shows District rules with post-2012 compliance dates that were incorporated in the future year inventories, along with information on EPA approval of these rules, and shows that emissions reductions assumed by the 2016 AQMP for future years for stationary sources are supported by rules approved as part of the SIP. With respect to mobile sources, the EPA has taken action in recent years to approve CARB mobile source regulations into the California SIP.⁴¹ We therefore find that the future year baseline projections in the 2016

⁴⁰ The 2012 base year inventory from the 2016 AQMP Inventory Supplement revises and updates the base year emission inventory included in the “8-Hour Ozone State Implementation Plan Emission Inventory Submittal” submitted by CARB on July 17, 2014. Because we understand the State intended the 2016 AQMP and the 2016 AQMP Inventory Supplement to replace the July 2014 submittal (at least with respect to Coachella Valley), we plan no further action on the inventory for Coachella Valley submitted by CARB in July 2014.

⁴¹ See 81 FR 39424 (June 16, 2016), 82 FR 14446 (March 21, 2017), and 83 FR 23232 (May 18, 2018).

AQMP Inventory Supplement are properly supported by SIP-approved stationary and mobile source measures.⁴²

B. Emissions Statement

1. Statutory and Regulatory Requirements

Section 182(a)(3)(B)(i) of the Act requires states to submit a SIP revision requiring owners or operators of stationary sources of VOC or NO_x to provide the state with statements of actual emissions from such sources. Statements must be submitted at least every year and must contain a certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. Section 182(a)(3)(B)(ii) of the Act allows states to waive the emissions statement requirement for any class or category of stationary sources that emit less than 25 tpy of VOC or NO_x, if the state provides an inventory of emissions from such class or category of sources as part of the base year or periodic inventories required under CAA sections 182(a)(1) and 182(a)(3)(A), based on the use of emissions factors established by the EPA or other methods acceptable to the EPA.

The preamble of the 2008 Ozone SRR states that if an area has a previously approved emissions statement rule for the 1997 ozone NAAQS or the 1-hour ozone NAAQS that covers all portions of the nonattainment area for the 2008 ozone NAAQS, such rule should be sufficient for purposes of the emissions statement requirement for the 2008 ozone NAAQS. The state should review the existing rule to ensure it is adequate and, if so, may rely on it to meet the emissions

⁴² The baseline emissions projections in the 2016 South Coast Ozone SIP assume implementation of CARB's Zero Emissions Vehicle (ZEV) sales mandate and greenhouse gas (GHG) standards. On September 27, 2019, the U.S. Department of Transportation and the EPA issued a notice of final rulemaking for the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program that, among other things, withdrew the EPA's 2013 waiver of preemption of CARB's ZEV sales mandate and GHG standards. 84 FR 51310. See also proposed SAFE rule at 83 FR 42986 (August 24, 2018). However, the agencies' final rule withdrawing the 2013 waiver did not include final action on the federal fuel economy and GHG vehicle emissions standards from the SAFE proposal. If the fuel economy and GHG standards are finalized prior to our final rulemaking on the 2016 Coachella Valley Ozone SIP, we will evaluate and address, as appropriate, the impact of the SAFE action on our proposed action.

statement requirement for the 2008 ozone NAAQS.⁴³ Where an existing emissions statement requirement is still adequate to meet the requirements of this rule, states can provide the rationale for that determination to the EPA in a written statement in the SIP to meet this requirement. States should identify the various requirements and how each is met by the existing emissions statement program. Where an emissions statement requirement is modified for any reason, states must provide the revision to the emissions statement as part of its SIP.

2. Summary of the State's Submission

The 2016 AQMP addresses compliance with the emissions statement requirement in CAA section 182(a)(3)(B) for the 2008 ozone NAAQS by reference to District Rule 301 that, among other things, requires emissions reporting from all stationary sources of NO_x and VOC greater than or equal to 4 tpy. District Rule 301 applies throughout both the South Coast and the Coachella Valley. On July 12, 2019, the District adopted revisions to District Rule 301 to meet the requirements in CAA section 182(a)(3)(B), and on July 19, 2019, the District submitted to CARB a request for Rule 301 to be included into the California SIP and forwarded to the EPA. On August 5, 2019, CARB adopted and submitted paragraphs (e)(1)(A) and (B), (e)(2), (e)(5) and (e)(8) of District Rule 301 to the EPA as a revision to the California SIP. The submittal includes CARB Executive Order S-19-011 adopting the specified sections of District Rule 301 as a revision to the SIP, a copy of District Rule 301 itself, and documentation of public notice and opportunity to comment on the draft rule.

3. The EPA's Review of the State's Submission

On October 1, 2019, as part of our approval of the 2016 South Coast Ozone SIP, the EPA approved portions of District Rule 301 (paragraphs (e)(1)(A) and (B), (e)(2), (e)(5) and (e)(8)) as

⁴³ See 80 FR 12264, at 12291 (March 6, 2015).

meeting the emissions statement requirement under CAA section 182(a)(3)(B) for the South Coast for the 2008 ozone NAAQS.⁴⁴ Rule 301 is effective throughout both the South Coast and the Coachella Valley. Therefore, the approved portions of District Rule 301 also satisfy the CAA 182(a)(3)(B) requirements for the 2008 ozone NAAQS in the Coachella Valley.

C. Reasonably Available Control Measures Demonstration and Control Strategy

1. Statutory and Regulatory Requirements

CAA section 172(c)(1) requires that each attainment plan provide for the implementation of all RACM as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through implementation of reasonably available control technology (RACT)), and also provide for attainment of the NAAQS. The 2008 Ozone SRR requires that, for each nonattainment area required to submit an attainment demonstration, the state concurrently submit a SIP revision demonstrating that it has adopted all RACM necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements.⁴⁵

The EPA has previously provided guidance interpreting the RACM requirement in the General Preamble for the Implementation of the Clean Air Act Amendments of 1990 (“General Preamble”) and in a memorandum entitled “Guidance on the Reasonably Available Control Measure Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas.”⁴⁶ In short, to address the requirement to adopt all RACM, states should consider all potentially reasonable control measures for source categories in the nonattainment area to

⁴⁴ 84 FR 52005, 52015.

⁴⁵ 40 CFR 51.1112(c).

⁴⁶ See General Preamble, 57 FR 13498, 13560 (April 16, 1992) and memorandum dated November 30, 1999, from John Seitz, Director, OAQPS, to Regional Air Directors, titled “Guidance on the Reasonably Available Control Measure Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas.”

determine whether they are reasonably available for implementation in that area and whether they would, if implemented individually or collectively, advance the area's attainment date by one year or more.⁴⁷ Any measures that are necessary to meet these requirements that are not already either federally promulgated, or part of the state's SIP, must be submitted in enforceable form as part of the state's attainment plan for the area.⁴⁸

2. Summary of the State's Submission

For the 2016 Coachella Valley Ozone SIP, the District, CARB, and SCAG each undertook a process to identify and evaluate potential RACM that could contribute to expeditious attainment of the 2008 ozone NAAQS in the Coachella Valley. The RACM demonstration for the Coachella Valley is the same demonstration undertaken for the 2016 South Coast Ozone SIP that the EPA approved on November 1, 2019.⁴⁹

a. District's RACM Analysis

The District's RACM demonstration for the 2008 ozone NAAQS focuses on stationary and area source controls, and it is described in Appendix VI-A ("Reasonably Available Control Measures (RACM) / Best Available Control Measures (BACM) Demonstration") of the 2016 AQMP. Appendix VI-A identifies potential control measures and analyzes these measures for

⁴⁷ Id. See also 44 FR 20372 (April 4, 1979), and memorandum dated December 14, 2000, from John S. Seitz, Director, OAQPS, to Regional Air Directors, titled "Additional Submission on RACM From States with Severe One-Hour Ozone Nonattainment Area SIPs."

⁴⁸ For ozone nonattainment areas classified as Moderate or above, CAA section 182(b)(2) also requires implementation of RACT for all major sources of VOC and for each VOC source category for which the EPA has issued a control techniques guideline. CAA section 182(f) requires that RACT under section 182(b)(2) also apply to major stationary sources of NO_x. In Severe areas, a major source is a stationary source that emits or has the potential to emit at least 25 tpy of VOC or NO_x (see CAA section 182(e) and (f)). Under the 2008 Ozone SRR, states were required to submit SIP revisions meeting the RACT requirements of CAA sections 182(b)(2) and 182(f) no later than 24 months after the effective date of designation for the 2008 Ozone NAAQS and to implement the required RACT measures as expeditiously as practicable but no later than January 1 of the 5th year after the effective date of designation (see 40 CFR 51.1112(a)). California submitted the CAA section 182 RACT SIP for the South Coast and the Coachella Valley on July 18, 2014, and the EPA fully approved this submission at 82 FR 43850 (September 20, 2017).

⁴⁹ 84 FR 52005.

emission reduction opportunities, as well as economic and technological feasibility. The District's comprehensive demonstration considers potential control measures for stationary and area sources located throughout the areas under its jurisdiction, including both the South Coast (where most of the sources are located) and the Coachella Valley. Therefore, the demonstration includes not only all of the source categories present in the Coachella Valley, but also the source categories found only in the South Coast.

As a first step in the RACM analysis, the District prepared a detailed inventory of emissions sources that emit VOC and NO_x to identify source categories from which emissions reductions would effectively contribute to attainment. Details on the methodology and development of the emissions inventory are discussed in Chapter 7 and Appendix III of the 2016 AQMP. A total of 76 source categories are included in the base year emissions inventory: 46 for stationary and area sources and 30 for mobile sources.⁵⁰

For the RACM analysis, the District then compared these source categories to its rules for stationary and area sources. This analysis builds upon a foundation of District rules developed for earlier ozone plans and approved as part of the SIP. We provide a list of the District's NO_x and VOC rules approved into the California SIP in Table 1 of our TSD for this proposed action. The 86 SIP-approved District VOC or NO_x rules listed in Table 1 of our TSD establish emissions limits or other types of emissions controls for a wide range of sources, including use of solvents, refineries, gasoline storage, architectural coatings, spray booths, various types of

⁵⁰ 2016 AQMP, Appendix VI–A, Table VI–A–3. The majority of the stationary emissions sources included in this inventory are located in the South Coast. The 2016 AQMP identifies only two stationary sources (i.e., Desert View Power and Imperial Irrigation District) emitting 10 tpy or more of either VOC or NO_x in 2012 located within the Coachella Valley. See 2016 AQMP, Appendix III, Attachment C. CARB's Facility Search Engine database shows three sources (i.e., Desert View Power, Palm Springs International Airport, and Sentinel Energy Center LLC) emitting 10 tpy or more of either VOC or NO_x emissions in 2017 located in the Coachella Valley. See the docket for today's action or go to CARB's database at <https://www.arb.ca.gov/app/emsinv/facinfo/facinfo.php> and set Air Basin search filter to "Salton Sea."

commercial coatings, boilers, steam generators and process heaters, oil and gas production well, marine tank vessel operations, and many more. These rules have already provided significant reductions toward attainment of the 2008 ozone NAAQS by 2026.

To demonstrate that the SCAQMD considered all candidate measures that are available and technologically and economically feasible, the District conducted a six-step analysis, as described below.

Step 1. 2015 Air Quality Technology Symposium (“2015 Symposium”).

The 2015 Symposium was held on June 10 and 11, 2015, with participation of technical experts and the public to solicit new and innovative concepts to assist in attaining the 1997 and 2008 ozone NAAQS by the applicable attainment dates. The SCAQMD also conducted extensive outreach to engage a wide range of stakeholders in the process.

Step 2. Reasonably Available Control Technology/Best Available Control Technology Analysis.

The District’s Reasonably Available Control Technology/Best Available Control Technology (RACT/BACT) analysis⁵¹ found four SCAQMD VOC or NO_x rules (i.e., District Rules 462 (“Organic Liquid Loading”), 1115 (“Motor Vehicle Assembly Line Coating Operations”), 1118 (“Control of Emissions from Refinery Flares”) and 1138 (“Control of Emissions from Restaurant Operations”)) that are less stringent than EPA control techniques guidelines or analogous rules in other air districts. The SCAQMD evaluated the rules as candidate potential measures. See section IV of the TSD for this action for the EPA’s evaluation of the four rules.

Step 3. EPA TSDs.

⁵¹ BACM, including BACT, is a requirement for certain PM_{2.5} nonattainment areas. BACM is not a requirement for ozone nonattainment areas, but because the District addresses both PM_{2.5} and ozone in its 2016 AQMP, the District prepared an analysis that addresses both RACT and BACT.

The District researched TSDs from recent EPA rulemakings on SCAQMD rules for EPA recommendations on potential control measures. The TSD for the EPA's action on District Rule 1125 ("Metal Container, Closure, and Coil Coating Operations," amended March 7, 2008) was the only applicable and recent TSD that met the criteria for review.

Step 4. Control measures in other areas.

The District reviewed control measures in other areas (i.e., Ventura County, San Francisco Bay Area, San Joaquin Valley, Sacramento Metropolitan, Dallas-Fort Worth and Houston-Galveston-Brazoria, New York, and New Jersey) to evaluate whether control technologies available and cost-effective within other areas would be available and cost-effective for use in the South Coast and the Coachella Valley.

Step 5. Control Measures beyond RACM in 2012 AQMP.

The District updated the RACM analysis for four control measures that were determined to be beyond RACM in the analysis for the prior 2012 AQMP, including reconsideration of emissions reductions of VOC from greenwaste composting.

Step 6. EPA Menu of Control Measures.

The Menu of Control Measures (MCM)⁵² compiled by the EPA's Office of Air Quality Planning and Standards was created to provide information useful in the development of emissions reduction strategies and to identify and evaluate potential control measures. District staff reviewed the MCM for point and nonpoint sources of NO_x and VOC.

The District provides a comprehensive evaluation of its RACM control strategy in Appendix VI-A of the 2016 AQMP. The evaluation includes the following: source descriptions; base year and projected baseline year emissions for the source category affected by the rule;

⁵² EPA, MCM, <http://www3.epa.gov/ttn/naaqs/pdfs/MenuOfControlMeasures.pdf>.

discussion of the current requirements of the rule; and discussion of potential additional control measures, including, in many cases, a discussion of the technological and economic feasibility of the additional control measures. This includes comparison of each District rule to analogous control measures adopted by other agencies.

Based on its RACM analysis for stationary and area sources under its jurisdiction, the District identified the following three additional RACM with quantifiable VOC and NO_x emission reductions: CMB-02 - Emission Reductions from Replacement with Zero or Near-Zero NO_x Appliances in Commercial and Residential Applications; CMB-03 - Emission Reductions from Non-Refinery Flares; and BCM-10 - Emission Reductions from Greenwaste Composting. These three RACM are included in the District's stationary source measures in Table 4-2 of the 2016 AQMP that the District Board adopted through Resolution 17-2. For the few remaining measures that the District rejected from its RACM analysis, the District determined that these measures would not collectively advance the attainment date or contribute to RFP due to the uncertain or non-quantifiable emissions reductions they would potentially generate.⁵³

Based on its evaluation of all available measures, the District concluded that its existing rules are generally as stringent as, or more stringent than, the analogous rules in other districts. Further, the District concluded that, based on its comprehensive review and evaluation of potential candidate measures and the adoption of commitments to implement the three measures determined to be technologically and economically feasible, the District meets the RACM requirement for the 2008 ozone NAAQS for all sources under the District's jurisdiction.

⁵³ 2016 AQMP, Appendix VI-A, page VI-A-40, and Attachments VI-A-1c, VI-A-1d, and VI-A-2.

Lastly, the District concluded that its controls will achieve attainment for the ozone standards as expeditiously as possible, and that the available control measures not included as plan commitments would not collectively advance attainment.⁵⁴

b. Local Jurisdictions' RACM Analysis and Transportation Control Measures

Appendix IV-C of the 2016 AQMP, contains the transportation control measure (TCM) RACM component for the 2016 South Coast Ozone SIP. The TCMs in Appendix IV-C are applicable in the upwind South Coast Air Basin. Because of the significant influence of pollutant transport from the South Coast Air Basin on ozone conditions in the Coachella Valley, neither the District nor CARB rely on implementation of any TCMs in the Coachella Valley to demonstrate implementation of RACM in the 2016 Coachella Valley Ozone SIP. SCAG conducted the TCM RACM analysis on behalf of the local jurisdictions in its region, based on its 2016 RTP/SCS and 2015 Federal Transportation Improvement Program (FTIP), as amended.⁵⁵ The 2016 RTP/SCS and FTIP were developed in consultation with federal, state and local transportation and air quality planning agencies and other stakeholders. The four county transportation commissions (CTCs),⁵⁶ including the Riverside CTC overseeing the Coachella Valley, were involved in the development of the regional transportation measures in Appendix IV-C.⁵⁷

As described in Appendix IV-C of the 2016 AQMP, for the TCM RACM analysis, SCAG compared the list of measures implemented within the South Coast with those

⁵⁴ 2016 AQMP, Appendix VI, page VI-A-40.

⁵⁵ The 2016 RTP/SCS was adopted by SCAG's Regional Council on April 7, 2016. The 2015 FTIP was adopted by SCAG's Executive/Administration Committee on September 11, 2014, and approved by the Federal Highway Administration on December 14, 2014.

⁵⁶ Los Angeles County Metropolitan Transportation Authority, Riverside County Transportation Commission, Orange County Transportation Authority, and the San Bernardino County Transportation Authority (formerly known as the San Bernardino Associated Governments).

⁵⁷ 2016 AQMP, Appendix IV-C, page IV-C-1.

implemented in other ozone and PM_{2.5} nonattainment areas.⁵⁸ SCAG then organized measures, including candidate measures and those measures currently implemented in the region, according to the sixteen categories specified in section 108(f)(1)(A) of the CAA. SCAG found a small number of candidate measures that were not currently implemented in the region and not included in the prior 2012 AQMP TCM RACM analysis. Attachment A (“Committed Transportation Control Measures (TCMs)”) to Appendix IV-C of the 2016 AQMP lists the TCM projects that are specifically identified and committed to in the 2016 AQMP. The complete listing of all candidate measures evaluated for the RACM determination is included in Attachment B (“2016 South Coast AQMP Reasonably Available Control Measures (RACM) Analysis – TCMs”) to Appendix IV-C of the 2016 AQMP. Based on its comprehensive review of TCM projects in other nonattainment areas or otherwise identified, SCAG determined that the TCMs being implemented in the South Coast are inclusive of all RACM.⁵⁹

c. CARB’s RACM Analysis

CARB’s RACM analysis is contained in Attachment VI-A-3 (“California Mobile Source Control Program Best Available Control Measures/Reasonably Available Control Measures Assessment”) (“BACM/RACM assessment”) to Appendix VI-A of the 2016 AQMP.

CARB’s BACM/RACM assessment provides a general description of CARB’s existing mobile source programs. A more detailed description of CARB’s mobile source control program, including a comprehensive table listing on- and off-road mobile source regulatory actions taken by CARB since 1985, is contained in Attachment VI-C-1 to Appendix VI-C of the 2016 AQMP. The BACM/RACM assessment and 2016 State Strategy collectively contain CARB’s evaluation

⁵⁸ The specific nonattainment area SIPs that were reviewed for candidate TCMs for ozone are listed in Table 4 of Appendix IV-C of the 2016 AQMP.

⁵⁹ Appendix IV-C, page IV-C-30.

of mobile source and other statewide control measures that reduce emissions of NO_x and VOC in California, including the Coachella Valley. The 2016 State Strategy also includes a commitment to take action on new measures and to achieve aggregate emissions reductions in the South Coast.⁶⁰ Because the Coachella Valley’s attainment of the 2008 ozone NAAQS is dependent on progress made in the upwind South Coast, this commitment will contribute to attainment in the Coachella Valley. On October 1, 2019, the EPA approved the 2016 South Coast Ozone SIP, including CARB’s commitment.⁶¹ For additional details on CARB’s commitment, see section III.D.2.b.ii of our notice for the proposed action.⁶²

Source categories for which CARB has primary responsibility for reducing emissions in California include most new and existing on- and off-road engines and vehicles, motor vehicle fuels, and consumer products. CARB developed its 2016 State Strategy through a multi-step measure development process, including extensive public consultation, to develop and evaluate potential strategies for mobile source categories under CARB’s regulatory authority that could contribute to expeditious attainment of the standard.⁶³ Through the process of developing the 2016 State Strategy, CARB identified certain defined measures as available to achieve additional VOC and NO_x emissions reductions from sources under CARB jurisdiction, including tighter requirements for new light- and medium-duty vehicles (referred to as the “Advanced Clean Cars 2” measure), a low-NO_x engine standard for vehicles with new heavy-duty engines, tighter emissions standards for small off-road engines, and more stringent requirements for consumer products, among others.⁶⁴ In adopting the 2016 State Strategy, CARB commits to bringing the

⁶⁰ 2016 State Strategy, Chapter 3 (“Proposed SIP Commitment”),

⁶¹ 84 FR 52005, 52015.

⁶² 84 FR 28132, 28147.

⁶³ Appendix VI-A, Attachment VI-A-3, page VI-A-102.

⁶⁴ 2016 State Strategy, Chapter 4 (“State SIP Measures”).

defined measures to the CARB Board for action according to the specific schedule included as part of the strategy.⁶⁵

Given the need for substantial emissions reductions from mobile and area sources to meet the NAAQS in California nonattainment areas, CARB established stringent control measures for on-road and off-road mobile sources and the fuels that power them. California has unique authority under CAA section 209 (subject to a waiver by the EPA) to adopt and implement new emission standards for many categories of on-road vehicles and engines, and new and in-use off-road vehicles and engines.

CARB's mobile source program extends beyond regulations that are subject to the waiver or authorization process set forth in CAA section 209 to include standards and other requirements to control emissions from in-use heavy-duty trucks and buses, gasoline and diesel fuel specifications, and many other types of mobile sources. Generally, these regulations have been submitted and approved as revisions to the California SIP.⁶⁶

In the BACM/RACM assessment, CARB concludes that, in light of the extensive public process culminating in the 2016 State Strategy, with the current mobile source program and proposed measures included in the 2016 State Strategy, there are no additional RACM that would advance attainment of the 2008 ozone NAAQS in the South Coast. As a result, CARB concludes that California's mobile source programs fully meet the RACM requirement.⁶⁷

Appendix IV-B of the 2016 AQMP describes CARB's current consumer products program and commitments in the 2016 State Strategy to achieve additional VOC reductions from

⁶⁵ CARB Resolution 17-7 (dated March 23, 2017), 7.

⁶⁶ See, e.g., the EPA's approval of standards and other requirements to control emissions from in-use heavy-duty diesel-powered trucks, at 77 FR 20308 (April 4, 2012), revisions to the California on-road reformulated gasoline and diesel fuel regulations at 75 FR 26653 (May 12, 2010), and revisions to the California motor vehicle inspection and maintenance program at 75 FR 38023 (July 1, 2010).

⁶⁷ 2016 AQMP, Appendix VI, page VI-A-106.

consumer products.⁶⁸ As described in this section, CARB's current consumer products program limits VOC emissions from 129 consumer product categories, including product categories such as antiperspirants and deodorants and aerosol coatings.⁶⁹ The EPA has approved many of these measures into the California SIP as VOC emissions controls for a wide array of consumer products.⁷⁰

3. The EPA's Review of the State's Submission

As described above, the District already implements many rules to reduce VOC and NO_x emissions from stationary and area sources in the Coachella Valley. For the 2016 AQMP, the District evaluated a range of potentially available measures and committed to adopt certain additional measures (i.e., CMB-02, CMB-03, and BCM-10) found to be reasonably available for implementation in the South Coast and Coachella Valley nonattainment areas. We find that the process followed by the District in the 2016 AQMP to identify additional RACM is generally consistent with the EPA's recommendations in the General Preamble, that the District's evaluation of potential measures is appropriate, and that the District has provided reasoned justifications for rejection of measures deemed not reasonably available.

With respect to mobile sources, CARB's current program addresses the full range of mobile sources in the South Coast and Coachella Valley through regulatory programs for both new and in-use vehicles. Moreover, we find that the process conducted by CARB to prepare the 2016 State Strategy was reasonably designed to identify additional available measures within

⁶⁸ 2016 AQMP, Appendix IV-B, page IV-B-93. CARB's consumer product measures are found in the California Code of Regulations, Title 17 ("Public Health"), Division 3 ("Air Resources"), Chapter 1 ("Air Resources Board"), Subchapter 8.5 ("Consumer Products").

⁶⁹ 2016 AQMP, Appendix IV-B, page IV-B-93.

⁷⁰ The compilation of such measures that have been approved into the California SIP, including *Federal Register* citations, is available at: <https://www.epa.gov/sips-ca/epa-approved-regulations-california-sip>. EPA's most recent approval of amendments to California's consumer products regulations was in 2014. 79 FR 62346 (October 17, 2014).

CARB's jurisdiction, and that CARB has adopted those measures that are reasonably available (e.g., the low-NO_x heavy-duty engine standard, among others). With respect to TCMs, we find that SCAG's process for identifying additional TCM RACM and conclusion that the TCMs being implemented in the South Coast (i.e., the TCMs listed in Attachment A to Appendix IV-C of the 2016 AQMP) are inclusive of all TCM RACM to be reasonably justified and supported. For the 2016 Coachella Valley Ozone SIP, given the significant influence of pollutant transport from the South Coast Air Basin and the minimal and diminishing emissions benefits generally associated with TCMs, no TCM or combination of TCMs implemented in the Coachella Valley would advance the attainment date in the Coachella Valley. Therefore, no TCMs are reasonably available for implementation in the Coachella Valley for the purposes of meeting the RACM requirement.

Additionally, we find that CARB's consumer products program comprehensively addresses emissions from consumer products in the South Coast and Coachella Valley. CARB measures are more stringent than the EPA's consumer products regulation promulgated in 1998,⁷¹ and generally exceed the controls in place throughout other areas of the country. The additional commitments included in the 2016 State Strategy will further strengthen this program by achieving additional VOC reductions.

Based on our review of these RACM analyses, the District's and CARB's adopted rules, and the District's commitment to adopt three additional reasonably available measures (i.e., CMB-02, CMB-03, and BCM-10), we propose to find that there are currently no additional RACM (including RACT) that would advance attainment of the 2008 ozone NAAQS in the Coachella Valley, and that the 2016 Coachella Valley Ozone SIP provides for the

⁷¹ 63 FR 48819 (September 11, 1998).

implementation of all RACM as required by CAA section 172(c)(1) and 40 CFR 51.1112(c). For additional background on the EPA's evaluation of the District's RACM analysis, see our June 17, 2019 notice of proposed rulemaking on the 2016 South Coast Ozone SIP.⁷²

D. Attainment Demonstration

1. Statutory and Regulatory Requirements

An attainment demonstration consists of: (1) technical analyses, such as base year and future year modeling, to locate and identify sources of emissions that are contributing to violations of the ozone NAAQS within the nonattainment area (i.e., analyses related to the emissions inventory for the nonattainment area and the emissions reductions necessary to attain the standards); (2) a list of adopted measures (including RACT controls) with schedules for implementation and other means and techniques necessary and appropriate for demonstrating RFP and attainment as expeditiously as practicable but no later than the outside attainment date for the area's classification; (3) a RACM analysis; and (4) contingency measures required under sections 172(c)(9) and 182(c)(9) of the CAA that can be implemented without further action by the state or the EPA to cover emissions shortfalls in RFP and failures to attain.⁷³ This subsection of today's proposed rule addresses the first two components of the attainment demonstration—the technical analyses and a list of adopted measures. Section III.C (Reasonably Available Control Measures Demonstration and Control Strategy) of this document addresses the RACM component, and section III.G (Contingency Measures) addresses the contingency measures component of the attainment demonstration in the 2016 Coachella Valley Ozone SIP.

⁷² 84 FR 28132, 28140. See also the EPA's November 1, 2019 approval of the 2016 South Coast Ozone SIP at 84 FR 52005.

⁷³ 78 FR 34178, 34184 (June 6, 2013) (proposed rule for implementing the 2008 ozone NAAQS).

With respect to the technical analyses, section 182(c)(2)(A) of the CAA requires that a plan for an ozone nonattainment area classified Serious or above include a “demonstration that the plan ... will provide for attainment of the ozone [NAAQS] by the applicable attainment date. This attainment demonstration must be based on photochemical grid modeling or any other analytical method determined ... to be at least as effective.” The attainment demonstration predicts future ambient concentrations for comparison to the NAAQS, making use of available information on measured concentrations, meteorology, and current and projected emissions inventories of ozone precursors, including the effect of control measures in the plan.

Areas classified Severe for the 2008 ozone NAAQS must demonstrate attainment as expeditiously as practicable, but no later than 15 years after the effective date of designation to nonattainment. The Coachella Valley was designated nonattainment for the 2008 ozone NAAQS effective July 20, 2012,⁷⁴ and accordingly the area must demonstrate attainment of the standards by July 20, 2027.⁷⁵ An attainment demonstration must show attainment of the standards by the calendar year prior to the attainment date, so in practice, Severe nonattainment areas must demonstrate attainment in 2026.

The EPA’s recommended procedures for modeling ozone as part of an attainment demonstration are contained in “Modeling Guidance for Demonstrating Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze” (“Modeling Guidance”).⁷⁶ The Modeling Guidance includes recommendations for a modeling protocol, model input preparation, model performance

⁷⁴ 77 FR 30087 (May 21, 2012).

⁷⁵ 80 FR 12264.

⁷⁶ Modeling Guidance, EPA 454/R-18-009, November 2018. See https://www3.epa.gov/ttn/scram/guidance/guide/O3-PM-RH-Modeling_Guidance-2018.pdf. The Modeling Guidance updates, but is largely consistent with, the earlier “Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for the 8-Hour Ozone and PM_{2.5} NAAQS and Regional Haze,” EPA-454/B-07-002, April 2007. Additional EPA modeling guidance can be found in 40 CFR 51 Appendix W, “Guideline on Air Quality Models,” 82 FR 5182 (January 17, 2017); available at <https://www.epa.gov/scram/clean-air-act-permit-modeling-guidance>.

evaluation, use of model output for the numerical NAAQS attainment test, and modeling documentation. Air quality modeling is performed using meteorology and emissions from a base year, and the predicted concentrations from this base case modeling are compared to air quality monitoring data from that year to evaluate model performance.

Once the model performance is determined to be acceptable, future year emissions are simulated with the model. The relative (or percent) change in modeled concentration due to future emissions reductions provides a relative response factor (RRF). Each monitoring site's RRF is applied to its monitored base year design value to provide the future design value for comparison to the NAAQS. The Modeling Guidance also recommends supplemental air quality analyses, which may be used as part of a weight of evidence (WOE) analysis. A WOE analysis corroborates the attainment demonstration by considering evidence other than the main air quality modeling attainment test, such as trends and additional monitoring and modeling analyses.

The Modeling Guidance also does not require a particular year to be used as the base year for 8-hour ozone plans.⁷⁷ The Modeling Guidance states that the most recent year of the National Emissions Inventory may be appropriate for use as the base year for modeling, but that other years may be more appropriate when considering meteorology, transport patterns, exceptional events, or other factors that may vary from year to year.⁷⁸ Therefore, the base year used for the attainment demonstration need not be the same year used to meet the requirements for emissions inventories and RFP.

With respect to the list of adopted measures, CAA section 172(c)(6) requires that nonattainment area plans include enforceable emissions limitations, and such other control

⁷⁷ Modeling Guidance at section 2.7.1, 35.

⁷⁸ Id.

measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emission rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for timely attainment of the NAAQS.⁷⁹ Under the 2008 Ozone SRR, all control measures needed for attainment must be implemented no later than the beginning of the attainment year ozone season.⁸⁰ The attainment year ozone season is defined as the ozone season immediately preceding a nonattainment area's maximum attainment date.⁸¹

2. Summary of the State's Submission

a. Photochemical Modeling

The 2016 Coachella Valley Ozone SIP includes photochemical modeling for the 2008 ozone NAAQS. The SCAQMD performed the air quality modeling for the 2016 Coachella Valley Ozone SIP. The modeling relies on a 2012 base year and demonstrates attainment of the 2008 ozone NAAQS in 2026.

As a general matter, the modeling for the 2016 Coachella Valley Ozone SIP represents an update to the photochemical modeling performed for the EPA-approved 2012 AQMP to account for more recent satellite-based input data, improved chemical gaseous and particulate mechanisms, improved computational resources and post-processing utilities, enhanced spatial and temporal allocations of the emissions inventory, and a revised attainment demonstration methodology. The modeling and modeled attainment demonstration are described in Chapter 5 ("Future Air Quality") of the 2016 AQMP. Chapter 7 ("Current and Future Air Quality: Desert Nonattainment Areas SIP") provides background information on the Coachella Valley, as well as the ozone attainment demonstration. Appendix V ("Modeling and Attainment Demonstration")

⁷⁹ See also CAA section 110(a)(2)(A).

⁸⁰ 40 CFR 51.1108(d).

⁸¹ 40 CFR 51.1100(h).

of the 2016 AQMP provides a description of model input preparation procedures, various model configuration options, and model performance statistics. The modeling protocol is in Chapter 2 (“Modeling Protocol”) of Appendix V of the 2016 AQMP and contains all the elements recommended in the Modeling Guidance. Those include: selection of model, time period to model, modeling domain, and model boundary conditions and initialization procedures; a discussion of emissions inventory development and other model input preparation procedures; model performance evaluation procedures; selection of days; and other details for calculating RRFs. Appendix V of the 2016 AQMP provides the coordinates of the modeling domain and thoroughly describes the development of the modeling emissions inventory, including its chemical speciation, its spatial and temporal allocation, its temperature dependence, and quality assurance procedures. Appendix C of CARB’s Staff Report for the 2016 AQMP, entitled “Coachella Valley Weight of Evidence,” provides additional information about ozone formation and trends in the Coachella Valley.

The modeling analysis used version 5.0.2 of the Community Multiscale Air Quality (CMAQ) photochemical model, developed by the EPA. To prepare meteorological input for CMAQ, the Weather and Research Forecasting model version 3.6 (WRF) from the National Center for Atmospheric Research was used. CMAQ and WRF are both recognized in the Modeling Guidance as technically sound, state-of-the-art models. The areal extent and the horizontal and vertical resolution used in these models were adequate for modeling Coachella Valley ozone.

The WRF meteorological model results and performance statistics are described in Chapter 3 (“Meteorological Modeling and Sensitivity Analyses”) of Appendix V. The District evaluated the performance of the WRF model through a series of simulations and concluded that

the daily WRF simulation for 2012 provided representative meteorological fields that well characterized the observed conditions. The District’s conclusions were supported by hourly time series graphs of wind speed, direction, and temperature for the southern California domain, included as Attachment 1 (“WRF Model Performance Time Series”) to Appendix V.

Ozone model performance statistics are described in the 2016 AQMP Appendix V, Chapter 5 (“8-Hour Ozone Attainment Demonstration”) which include tables of statistics recommended in the Modeling Guidance for ozone for the South Coast sub-regions, including the Coachella Valley.⁸² Hourly time series are presented as well as density scatter plots, and plots of bias against concentration. Note that, because only relative changes are used from the modeling, the underprediction of ozone concentrations does not mean that future concentrations will be underestimated.

After model performance for the 2012 base case was accepted, the model was applied to develop RRFs for the attainment demonstration. This entailed running the model with the same meteorological inputs as before, but with adjusted emissions inventories to reflect the expected changes between 2012 and the 2026 attainment year. The base year or “reference year” modeling inventory was the same as the inventory for the modeling base case. The 2026 inventory projects the base year into the future by including the effect of economic growth and emissions control measures. The set of 153 days from May 1 through September 30, 2012, was simulated and analyzed to determine 8-hour average maximum ozone concentrations for the 2012 and 2026 emissions inventories. To develop the RRFs for the 8-hour ozone NAAQS, only the top 10 days were used, consistent with the Modeling Guidance.⁸³

⁸² The other sub-regions are the “Coastal,” “San Fernando,” “Foothills,” “Urban Source,” and “Urban Receptor” zones.

⁸³ See Modeling Guidance at section 4.2.1.

The Modeling Guidance addresses attainment demonstrations with ozone NAAQS based on 8-hour averages, and for the 2008 ozone NAAQS, the 2016 AQMP carried out the attainment test procedure consistent with the Modeling Guidance. The RRFs were calculated as the ratio of future to base year concentrations. The resulting RRFs were then applied to 2012 weighted base year design values⁸⁴ for each monitor to arrive at 2026 future year design values. Ozone is measured continuously at two locations in the Coachella Valley at the Palm Springs and Indio air monitoring stations. The modeled 2026 ozone design value at the Palm Springs site (the higher of the two sites) is 0.075 ppm; this value demonstrates attainment of the 2008 ozone NAAQS.⁸⁵

The 2016 AQMP modeling includes a WOE demonstration, based on a model performance evaluation of the temporal profile of on-road mobile source emissions and spatial surrogate profiles of area emissions.⁸⁶ The demonstration is based on a sensitivity analysis of four scenarios of emissions reductions. Appendix C of CARB's Staff Report for the 2016 AQMP also provides a WOE discussion that includes information about ozone formation in the Coachella Valley. The WOE demonstration in Appendix C includes ambient ozone data and trends, precursor emissions trends and reductions, and population exposure trends to complement the regional photochemical modeling analyses.

b. Control Strategy for the 2008 Ozone NAAQS

The control strategy for attainment of the 2008 ozone NAAQS in the Coachella Valley relies primarily on timely attainment in 2023 of the 1997 ozone NAAQS in the South Coast. Continued air quality improvement in the Coachella Valley is expected during the 2023 through

⁸⁴ The Modeling Guidance recommends that RRFs be applied to the average of three three-year design values centered on the base year, in this case the design values for 2010-2012, 2011-2013, and 2012-2014. This amounts to a 5-year weighted average of individual year 4th high concentrations, centered on the base year of 2012, and so is referred to as a weighted design value.

⁸⁵ 2016 AQMP, Appendix V, page V-5-28.

⁸⁶ 2016 AQMP, Appendix V, pages V-5-36 to V-5-41.

2026 timeframe because of ongoing fleet turnover in the Coachella Valley and South Coast and from existing measures and additional reductions from new measures implemented before 2027 for attainment of the 2008 ozone NAAQS by 2031 in the South Coast.

The control strategy in the 2016 South Coast Ozone SIP for attainment of the 1997 ozone NAAQS by 2023 in the South Coast relies on emissions reductions from already-adopted measures, commitments by the District to certain regulatory and nonregulatory initiatives and aggregate emissions reductions, and commitments by CARB to certain regulatory and nonregulatory initiatives and aggregate emissions reductions. Already-adopted measures are expected to achieve approximately 66 percent of the NO_x reductions needed from the 2012 base year for the South Coast to attain the NAAQS in 2023. To address the remaining emissions reductions, the 2016 South Coast Ozone SIP includes District and CARB aggregate commitments to achieve additional emissions reductions by 2023, as shown in tables 2, 3, and 4 below. Table 2 summarizes the additional reduction commitments in the 2016 South Coast Ozone SIP. Tables 3 and 4 show the District and CARB measures included in the aggregate commitments in Table 2. The emissions reductions for individual measures shown in tables 3 and 4 are not intended to be enforceable; they are estimates prepared by the District and CARB to show how they expect at the present time to achieve the aggregate emissions reductions for 2023. The EPA’s June 17, 2019 proposed approval of the 2016 South Coast Ozone SIP provides an extensive discussion of the control strategy and attainment demonstrations for the upwind South Coast to attain the 1997 and 2008 ozone NAAQS.⁸⁷

Table 2 – District and CARB Aggregate Emission Reduction Commitments for 2023 in 2016 South Coast Ozone Plan (summer planning inventory, tpd) ^a	
	Year 2023

⁸⁷ 84 FR 28132.

Plan	NO_x	VOC
SCAQMD ^b	23	6
CARB ^c	113	50-51
Total	136	56-57

^a Rounded to whole number.

^b 2016 AQMP, tables 4-9, 4-10 and 4-11. Reductions are from the 2012 base year.

^c 2016 State Strategy, Table 4, and CARB Resolution 17-7 (March 23, 2017). Reductions are from the 2012 base year.

Table 3 - District Measures with Reductions by 2023 in 2016 AQMP					
Number	Title	Adoption	Implementation Period	NO_x Emission Reductions (tpd)	VOC Emission Reductions (tpd)
CMB-01	Transition to Zero and Near-Zero Emission Technologies for Stationary Sources	2018	Ongoing	2.5	1.2 ^a
CMB-02	Emission Reductions from Replacement with Zero or Near-Zero NO _x Appliances in Commercial and Residential Applications	2018	2020–2031	1.1	-
CMB-03	Emission Reductions from Non-Refinery Flares	2018	2020	1.4	0.4 ^a
CMB-04	Emission Reductions from Restaurant Burners and Residential Cooking	2018	2022	0.8	-
BCM-10	Emission Reductions from Greenwaste Composting	2019	2020	-	1.5
FUG-01	Improved Leak Detection and Repair	2019	2022	-	2.0
CTS-01	Further Emission Reductions from Coatings, Solvents, Adhesives, and Sealants	2017/2021	2020–2031	-	1.0
ECC-02	Co-Benefits from Existing Residential and Commercial Building Energy Efficiency Measures	2018	Ongoing	0.3	0.1 ^a
ECC-03	Additional Enhancements in	2018	Ongoing	1.2	0.2 ^a

	Reducing Existing Residential Building Energy Use				
Stationary Sources Totals				7.3	6.4
MOB-10	Extension of the SOON ^b Provision for Construction/Industrial Equipment	NA	Ongoing	1.9	-
MOB-11	Extended Exchange Program	NA	Ongoing	2.9	-
MOB-14	Emission Reductions from Incentive Programs	NA	2016–2024	11	-
Mobile Sources Totals				15.8	-
Stationary and Mobile Sources Totals				23.1	6.4
Notes:					
^a Corresponding VOC reductions from other measures.					
^b Surplus Off-Road Opt-In for NO _x Program					
The sum of the emissions values may not equal the total shown due to rounding of the numbers.					

Source: 2016 AQMP, tables 4-2, 4-4, 4-9, 4-10 and 4-11.

Table 4 – Measures with Reductions by 2023 in CARB’s 2016 State Strategy					
Title	Adoption	Implementation		NO _x Emission Reductions (tpd)	VOC Emission Reductions (tpd)
		Time Frame	Agency		
On-Road Light-Duty					
Further Deployment of Cleaner Technologies ^a	ongoing	2016	CARB, SCAQMD, EPA	7	16
On-Road Heavy-Duty					
Lower In-Use Emission Performance Level	2017 – 2020	2018 +	CARB	NYQ	<0.1
Innovative Clean Transit	2017	2018	CARB	<0.1	<0.1
Last Mile Delivery	2018	2020	CARB	<0.1	<0.1
Incentive Funding to Achieve Further Emission Reductions from On-Road Heavy Duty Vehicles ^b	ongoing	2016	CARB, SCAQMD	3	0.4
Further Deployment of Cleaner Technologies ^a	ongoing	2016	CARB, SCAQMD,	34	4

			EPA		
Aircraft					
Further Deployment of Cleaner Technologies ^a	ongoing	2016	CARB, SCAQMD, EPA	9	NYQ
Locomotives					
More Stringent National Locomotive Emission Standards	2017	2023	EPA	<0.1	<0.1
Further Deployment of Cleaner Technologies ^a	ongoing	2016	CARB, SCAQMD, EPA	7	0.3
Ocean-Going Vessels					
At-Berth Regulation Amendments	2017 – 2018	2023	CARB	0.3	<0.1
Further Deployment of Cleaner Technologies ^a	ongoing	2016	CARB, SCAQMD, EPA	30	NYQ
Off-Road Equipment					
Zero-Emission Airport Ground Support Equipment	2018	2023	CARB	<0.1	<0.1
Small Off-Road Engines	2018 – 2020	2022	CARB	0.7	7
Low-Emission Diesel Requirement	by 2020	2023	CARB	0.3	NYQ
Further Deployment of Cleaner Technologies ^a	ongoing	2016	CARB, SCAQMD, EPA	21	21
Consumer Products					
Consumer Products Program	2019 – 2021	2020 +	CARB	0	1-2
Total Emission Reductions				113	50-51
Notes: ^a CARB requested the EPA approve the “Further Deployment of Cleaner Technologies” measures under the provisions of section 182(e)(5) of the CAA. In today’s action we also refer to these as new technology measures. ^b On March 22, 2018, CARB adopted the “South Coast On-Road Heavy-Duty Vehicle Incentive Measure.” On April 25, 2019, the EPA proposed to approve the measure as achieving 1 tpd of NO _x reductions in 2023. See 84 FR 17365. NYQ means not yet quantified. The sum of the emissions values may not equal the total shown due to rounding of the numbers.					

Source: 2016 State Strategy, Table 4; Attachment A to CARB Resolution 17-7 (March 23, 2017).

c. Attainment Demonstration

Chapter 7 of the 2016 AQMP includes a section entitled “Ozone Attainment Demonstration and Projections,” which describes the Coachella Valley’s progress toward attaining the 1997, 2008, and 2015 ozone standards.⁸⁸ For the 2008 ozone NAAQS, the 2016 AQMP summarizes the District’s modeling for the area, and concludes that the measures included in the control strategy (including CARB commitments) will result in the area attaining the standards no later than 2026. The WOE discussion in Appendix C of CARB’s Staff Report for the 2016 AQMP provides additional discussion of air quality trends and projections in the Coachella Valley and determines that the area is on track to attain the 2008 ozone NAAQS by 2026.

3. The EPA’s Review of the State’s Submission

a. Photochemical Modeling

As discussed above in Section III.A of this notice, we are proposing to approve the base year emissions inventory and to find that the future year emissions projections in the 2016 AQMP reflect appropriate calculation methods and that the latest planning assumptions are properly supported by SIP-approved stationary and mobile source measures. In the discussion below, we address our findings for the modeling submitted with the 2016 Coachella Valley Ozone SIP. Because of the importance of ozone transport from the South Coast to attainment in the Coachella Valley, and the close interactions of the modeling for each area, we have considered the modeling for both areas. Similar and additional discussion for the South Coast can be found in our June 17, 2019 proposed action on the 2016 South Coast Ozone SIP.⁸⁹

⁸⁸ 2016 AQMP, 7-35 to 7-40.

⁸⁹ 84 FR 28132.

Based on our review of Appendix V of the 2016 AQMP, the EPA finds that the photochemical modeling is adequate for purposes of supporting the attainment demonstration.⁹⁰ First, we note the extensive discussion of modeling procedures, tests, and performance analyses called for in the Modeling Protocol (i.e., Chapter 2 of Appendix V of the 2016 AQMP) and the good model performance. Second, we find the WRF meteorological model results and performance statistics, including hourly time series graphs of wind speed, direction, and temperature for both the South Coast and the Coachella Valley, to be satisfactory and consistent with our Modeling Guidance.⁹¹ Performance was evaluated for each month in each zone for the entire year of 2012.⁹² Diurnal variation of temperature, humidity and surface wind are well represented by WRF. Geographically, winds are predicted most accurately at the inland urban receptor sites. Accurate wind predictions in this region of elevated ozone concentrations is one of the most critical factors to simulate chemical transport to the Coachella Valley. Overall, the daily WRF simulation for 2012 provided representative meteorological fields that characterized the observed conditions well.

The model performance statistics for ozone are described in Chapter 5 of Appendix V and are based on the statistical evaluation recommended in the Modeling Guidance. Model performance was provided for 8-hour daily maximum ozone for Coachella Valley as well as other areas in the Southern California modeling domain.⁹³ A geographical bias is shown in the

⁹⁰ The EPA's review of the modeling and attainment demonstration is discussed in greater detail in section VI of the TSD ("Modeling and Attainment Demonstration").

⁹¹ Modeling Guidance, 30.

⁹² Temperature, water vapor mixing ratio, and wind speed were evaluated in terms of normalized gross bias and normalized gross error.

⁹³ 2016 AQMP Appendix V, Table V-5-8. These zones are represented by the following ozone monitoring sites: "Coastal" (Costa Mesa, LAX, Long Beach, Mission Viejo, West Los Angeles); "Urban Source" (Anaheim, Central Los Angeles, Compton, La Habra, Pico Rivera, Pomona); "San Fernando" (Reseda, Santa Clarita, Burbank); "Foothills" (Azusa, Glendora, Pasadena); "Urban Receptor" (Crestline, Fontana, Lake Elsinore, Mira Loma, Redlands, Rubidoux, San Bernardino, Upland); and "Coachella Valley" (Palm Springs and Indio).

time series, with over-prediction in coastal areas, and under-prediction in the inland areas, including Coachella Valley.⁹⁴ The 2016 AQMP also presents ozone frequency distributions, scatter plots, and plots of bias against concentration. The scatter and density scatter plots show low bias at high concentrations, and higher bias at low concentrations. The low bias at high concentrations is important because it reflects the model's capability to predict high concentrations, in particular, the top 10 days that form the basis for the RRF calculation. The supplemental hourly time series show generally good performance, though many individual daily ozone peaks are underpredicted. As noted above, however, the underprediction of absolute ozone concentrations does not mean that future concentrations will be underestimated. In addition, the WOE analysis presented in Appendix C of CARB's Staff Report for the 2016 Coachella Valley Ozone SIP provides additional information with respect to the sensitivity to emissions changes and further supports the model performance. We are proposing to find the air quality modeling adequate to support the attainment demonstration for the 2008 ozone NAAQS, based on reasonable meteorological and ozone modeling performance, and supported by the weight of evidence analyses. For additional information, please see section VI of the TSD for this action.

b. Control Strategy

The Coachella Valley control strategy relies primarily on previously adopted and future emissions reductions detailed in the 2016 South Coast Ozone SIP. As described in Section III.D.2.b above, a significant portion of the emissions reductions needed to attain the 1997 ozone NAAQS in the South Coast by 2023 will be obtained through previously adopted measures in the SIP, and the balance of the reductions needed for attainment will result from enforceable

⁹⁴ The model performance varied by zone, with over-prediction in the "Coastal" zone and under-prediction in the "San Fernando," and "Foothills" zones. The model ozone predictions in the "Urban Receptor" zone agree reasonably well with the measurements.

commitments to take certain specific actions within prescribed periods and to achieve aggregate tonnage reductions of VOC or NO_x by specific years. The aggregate commitments provide the remaining additional upwind reductions necessary for the Coachella Valley to attain the 2008 ozone NAAQS by 2026. In our October 1, 2019 approval of the 2016 South Coast Ozone SIP, the EPA approved the control strategy, including CARB's and the District's aggregate commitments, for the South Coast to attain the 1997 ozone NAAQS.⁹⁵ For the reasons described in that action, and based on the District's demonstration specific to the Coachella Valley described above, we propose to find the District's control strategy acceptable for purposes of attaining the 2008 ozone NAAQS in the Coachella Valley. For additional information, please see the TSD for this action.

c. Attainment Demonstration

Based on our proposed determinations that the photochemical modeling and control strategy are acceptable, we propose to approve the attainment demonstration for the 2008 ozone NAAQS in the 2016 Coachella Valley Ozone SIP as meeting the requirements of CAA section 182(c)(2)(A) and 40 CFR 51.1108.

E. Rate of Progress Plan and Reasonable Further Progress Demonstration

1. Statutory and Regulatory Requirements

Requirements for RFP for ozone nonattainment areas are specified in CAA sections 172(c)(2), 182(b)(1), and 182(c)(2)(B). Under CAA section 171(1), RFP is defined as meaning such annual incremental reductions in emissions of the relevant air pollutant as are required under part D ("Plan Requirements for Nonattainment Areas") of the CAA or as may reasonably be required by the EPA for the purpose of ensuring attainment of the applicable NAAQS by the

⁹⁵ See 84 FR 52005.

applicable date. CAA section 182(b)(1) specifically requires that ozone nonattainment areas classified as Moderate or above demonstrate a 15 percent reduction in VOC between the years of 1990 and 1996. The EPA has typically referred to section 182(b)(1) as the rate of progress (ROP) requirement. For ozone nonattainment areas classified as Serious or higher, section 182(c)(2)(B) requires VOC reductions of at least 3 percent of baseline emissions per year, averaged over each consecutive 3-year period, beginning 6 years after the baseline year until the attainment date. Under CAA section 182(c)(2)(C), a state may substitute NO_x emissions reductions for VOC emissions reductions. Additionally, CAA section 182(c)(2)(B)(ii) allows an amount less than 3 percent of such baseline emissions each year if a state demonstrates to the EPA that its plan includes all measures that can feasibly be implemented in the area in light of technological achievability.

In the 2008 Ozone SRR, the EPA provides that areas classified Moderate or higher will have met the ROP requirements of CAA section 182(b)(1) if the area has a fully approved 15 percent ROP plan for the 1-hour or 1997 ozone NAAQS.⁹⁶ For such areas, the EPA interprets the RFP requirements of CAA section 172(c)(2) to require areas classified as Moderate to provide a 15 percent emissions reduction of ozone precursors within 6 years of the baseline year. Areas classified as Serious or higher must meet the RFP requirements of CAA section 182(c)(2)(B) by providing an 18 percent reduction of ozone precursors in the first 6-year period, and an average ozone precursor emissions reduction of 3 percent per year for all remaining 3-year periods thereafter.⁹⁷ The 2008 Ozone SRR allows substitution of NO_x reductions for VOC reductions to meet the CAA section 172(c)(2) and 182(c)(2)(B) RFP requirements.⁹⁸

⁹⁶ 70 FR 12264, 12271 (March 6, 2015).

⁹⁷ Id.

⁹⁸ Id.; 40 CFR 51.1110(a)(2)(i)(C) and 40 CFR 51.1110(a)(2)(ii)(B).

Except as specifically provided in CAA section 182(b)(1)(C), emissions reductions from all SIP-approved, federally promulgated, or otherwise SIP-creditable measures that occur after the baseline year are creditable for purposes of demonstrating that the RFP targets are met. Because the EPA has determined that the passage of time has caused the effect of certain exclusions to be de minimis, the RFP demonstration is no longer required to calculate and specifically exclude reductions from measures related to motor vehicle exhaust or evaporative emissions promulgated by January 1, 1990; regulations concerning Reid vapor pressure promulgated by November 15, 1990; measures to correct previous RACT requirements; and measures required to correct previous inspection and maintenance (I/M) programs.⁹⁹

The 2008 Ozone SRR requires the RFP baseline year to be the most recent calendar year for which a complete triennial inventory was required to be submitted to the EPA. For the purposes of developing RFP demonstrations for the 2008 ozone NAAQS, the applicable triennial inventory year is 2011. As discussed previously, the 2008 Ozone SRR provided states with the opportunity to use an alternative baseline year for RFP,¹⁰⁰ but that provision of the 2008 Ozone SRR was vacated by the D.C. Circuit in the *South Coast II* decision.

2. Summary of the State's Submission

In response to the *South Coast II* decision, CARB developed the 2018 SIP Update to revise the RFP demonstrations in previously submitted ozone SIPs, including the Coachella Valley RFP demonstration in the 2016 AQMP. The 2018 SIP Update includes updated emissions estimates for the 2011 RFP baseline year, subsequent milestone years, and the attainment year.¹⁰¹ To develop the 2011 RFP baseline inventory, CARB relied on actual emissions reported from

⁹⁹ 40 CFR 51.1110(a)(7).

¹⁰⁰ 40 CFR 51.1110(b).

¹⁰¹ 2018 SIP Update, RFP demonstration, section IX-B, 44 and 45.

industrial point sources for year 2011 and backcast emissions from smaller stationary sources and area sources from 2012 to 2011 using the same growth and control factors as was used for the 2016 AQMP. To develop the emissions inventories for the RFP milestone years (i.e., 2017, 2020, 2023) and attainment year (2026), CARB also relied upon the same growth and control factors as the 2016 AQMP.¹⁰² For both sets of baseline emissions inventories (those in the 2016 AQMP and those in the 2018 SIP Update), emissions estimates reflect District rules adopted through December 2015 and CARB rules adopted through November 2015.

The updated RFP demonstration for Coachella Valley for the 2008 ozone NAAQS is shown in Table 5. The updated RFP demonstration calculates future year VOC targets from the 2011 baseline, consistent with CAA 182(c)(2)(B)(i), which requires reductions of “at least 3 percent of baseline emissions each year,” and it substitutes NO_x reductions for VOC reductions beginning in milestone year 2020 to meet VOC emission targets.¹⁰³ For the Coachella Valley, CARB concludes that the RFP demonstration meets the applicable requirements for each milestone year as well as the attainment year.

Table 5 - RFP Demonstration for the Coachella Valley for the 2008 Ozone NAAQS (summer planning inventory, tpd or percent)					
	VOC				
	2011	2017	2020	2023	2026
Baseline VOC	16.9	14.8	14.5	14.7	15.1
Required change since 2011 (VOC or NO _x), %		18%	27%	36%	45%
Required reductions since 2011		3.0	4.6	6.1	7.6
Target VOC level		13.9	12.3	10.8	9.3
Apparent shortfall in VOC		-0.9	-2.2	-3.9	-5.8
Apparent shortfall in VOC, %		-5.6%	-13.0%	-23.0%	-34.1%

¹⁰² Documentation for the Coachella Valley RFP baseline and milestone emissions inventories is found in the 2018 SIP Update on pages 4–5, 44–45, and Appendix A, pages A-23 to A-26.

¹⁰³ NO_x substitution is permitted under EPA regulations. See 40 CFR 51.1110(a)(2)(i)(C) and 40 CFR 51.1110(a)(2)(ii)(B); and 70 FR 12264, at 12271 (March 6, 2015).

VOC shortfall previously provided by NO _x substitution, %		0.0%	5.6%	13.0%	23.0%
Actual VOC shortfall, %		-5.6%	-7.5%	-10.0%	-11.1%
	NO_x				
	2011	2017	2020	2023	2026
Baseline NO _x	29.8	18.1	14.9	10.2	9.1
Change in NO _x since 2011		11.8	15.0	19.6	20.7
Change in NO _x since 2011, %		39.4%	50.2%	65.8%	69.4%
NO _x reductions used for VOC substitution through last milestone year, %		0%	5.6%	13.0%	23.0%
NO _x reductions since 2011 available for VOC substitution in this milestone year, %		39.4%	44.6%	52.8%	46.4%
NO _x reductions since 2011 used for VOC substitution in this milestone year, %		5.6%	7.5%	10.0%	11.1%
NO _x reductions since 2011 surplus after meeting VOC substitution needs in this milestone year, %		33.9%	37.2%	42.9%	35.3%
Total shortfall for RFP		0%	0%	0%	0%
RFP met?		Yes	Yes	Yes	Yes

Source: Table VII-2 of the 2018 SIP Update.

3. The EPA's Review of the State's Submission

In 2017, the EPA approved a 15 percent ROP plan for the Coachella Valley.¹⁰⁴ As a result, the District and CARB have met the ROP requirements of CAA section 182(b)(1) for the Coachella Valley and do not need to demonstrate another 15 percent reduction in VOC for this area.

Based on our review of the emissions inventory documentation in the 2016 AQMP and 2018 SIP Update, we find that CARB and the District have used the most recent planning and activity assumptions, emissions models, and methodologies in developing the RFP baseline and milestone year emissions inventories. We have also reviewed the calculations in Table VII-2 of

¹⁰⁴ 82 FR 26854 (June 12, 2017).

the 2018 SIP Update (presented in Table 2 above) and find that the District and CARB have used an appropriate calculation method to demonstrate RFP. For these reasons, we have determined that the 2016 Coachella Valley Ozone SIP demonstrates RFP, in each milestone year and the attainment year, consistent with applicable CAA requirements and EPA guidance. We therefore propose to approve the RFP demonstrations for the Coachella Valley for the 2008 ozone NAAQS under sections 172(c)(2), 182(b)(1) and 182(c)(2)(B) of the CAA and 40 CFR 51.1110(a)(2)(ii).

F. Transportation Control Strategies and Measures to Offset Emissions Increases from Vehicle Miles Traveled

1. Stationary and Regulatory Requirements

Section 182(d)(1)(A) of the Act requires, in relevant part, a state to submit, for each area classified as Serious or above, a SIP revision that “identifies and adopts specific enforceable transportation control strategies and transportation control measures to offset any growth in emissions from growth in vehicle miles traveled or number of vehicle trips in such area.”¹⁰⁵

Herein, we use “VMT” to refer to vehicle miles traveled and refer to the related SIP requirement as the “VMT emissions offset requirement.” In addition, we refer to the SIP revision intended to demonstrate compliance with the VMT emissions offset requirement as the “VMT emissions offset demonstration.”

¹⁰⁵ CAA section 182(d)(1)(A) includes three separate elements. In short, under section 182(d)(1)(A), states are required to adopt transportation control strategies and measures to offset growth in emissions from growth in VMT, and, as necessary, in combination with other emission reduction requirements, to demonstrate RFP and attainment. For more information on the EPA’s interpretation of the three elements of section 182(d)(1)(A). See 77 FR 58067 58068 (September 19, 2012) (proposed withdrawal of approval of South Coast VMT emissions offset demonstrations). In section III.F of this document, we are addressing the first element of CAA section 182(d)(1)(A) (i.e., the VMT emissions offset requirement). In sections III.E and D of this document, we are proposing to approve the RFP and attainment demonstrations, respectively, for the 2008 ozone NAAQS in the Coachella Valley, and compliance with the second and third elements of section 182(d)(1)(A) is predicated on final approval of the RFP and attainment demonstrations.

In *Association of Irrigated Residents v. EPA*, the Ninth Circuit ruled that additional transportation control measures are required whenever vehicle emissions are projected to be higher than they would have been had VMT not increased, even when aggregate vehicle emissions are actually decreasing.¹⁰⁶ In response to the court’s decision, in August 2012, the EPA issued a memorandum titled “Implementing Clean Air Act Section 182(d)(1)(A): Transportation Control Measures and Transportation Control Strategies to Offset Growth in Emissions Due to Growth in Vehicle Miles Travelled” (“August 2012 Guidance”).¹⁰⁷

The August 2012 Guidance discusses the meaning of “transportation control strategies” (TCS) and “transportation control measures” (TCM) and recommends that both TCSs and TCMs be included in the calculations made for the purpose of determining the degree to which any hypothetical growth in emissions due to growth in VMT should be offset. Generally, TCS is a broad term that encompasses many types of controls (including, for example, motor vehicle emissions limitations, I/M programs, alternative fuel programs, other technology-based measures, and TCMs) that would fit within the regulatory definition of “control strategy.”¹⁰⁸ A TCM is defined at 40 CFR 51.100(r) as “any measure that is directed toward reducing emissions of air pollutants from transportation sources,” including, but not limited to, those listed in section 108(f) of the Clean Air Act. TCMs generally refer to programs intended to reduce VMT, number of vehicle trips, or traffic congestion, such as programs for improved public transit, designation of certain lanes for passenger buses and high-occupancy vehicles, and trip reduction ordinances.

¹⁰⁶ See *Association of Irrigated Residents v. EPA*, 632 F.3d. 584, at 596-597 (9th Cir. 2011), reprinted as amended on January 27, 2012, 686 F.3d 668, further amended February 13, 2012 (“*Association of Irrigated Residents*”).

¹⁰⁷ Memorandum dated August 30, 2012, Karl Simon, Director, Transportation and Climate Division, Office of Transportation and Air Quality, to Carl Edland, Director, Multimedia Planning and Permitting Division, EPA Region 6, and Deborah Jordan, Director, Air Division, EPA Region 9.

¹⁰⁸ See, e.g., 40 CFR 51.100(n).

The August 2012 Guidance explains how states may demonstrate that the VMT emissions offset requirement is satisfied in conformance with the Court’s ruling in *Association of Irrigated Residents*. Under the August 2012 Guidance, states would develop one emissions inventory for the base year and three different emissions inventory scenarios for the attainment year. For the attainment year, the state would present three emissions estimates, two of which would represent hypothetical emissions scenarios that would provide the basis to identify the “growth in emissions” due solely to the growth in VMT, and one that would represent projected actual motor vehicle emissions after fully accounting for projected VMT growth and offsetting emissions reductions obtained by all creditable TCSs and TCMs. See the August 2012 Guidance for specific details on how states might conduct the calculations.

The base year on-road VOC emissions should be calculated using VMT in that year, and it should reflect all enforceable TCSs and TCMs in place in the base year. This would include vehicle emissions standards, state and local control programs, such as I/M programs or fuel rules, and any additional implemented TCSs and TCMs that were already required by or credited in the SIP as of that base year.

The first of the emissions calculations for the attainment year would be based on the projected VMT and trips for that year and assume that no new TCSs or TCMs beyond those already credited in the base year inventory have been put in place since the base year. This calculation demonstrates how emissions would hypothetically change if no new TCSs or TCMs were implemented, and VMT and trips were allowed to grow at the projected rate from the base year. This estimate would show the potential for an increase in emissions due solely to growth in VMT and trips. This represents a “no action” scenario. Emissions in the attainment year in this scenario may be lower than those in the base year due to the fleet that was on the road in the base

year gradually being replaced through fleet turnover; however, provided VMT and/or numbers of vehicle trips will in fact increase by the attainment year, they would still likely be higher than they would have been assuming VMT had held constant.

The second of the attainment year's emissions calculations would assume that no new TCSs or TCMs beyond those already credited have been put in place since the base year, but it would also assume that there was no growth in VMT and trips between the base year and attainment year. This estimate reflects the hypothetical emissions level that would have occurred if no further TCMs or TCSs had been put in place and if VMT and trip levels had held constant since the base year. Like the "no action" attainment year estimate described above, emissions in the attainment year may be lower than those in the base year due to the fleet that was on the road in the base year gradually being replaced by cleaner vehicles through fleet turnover, but in this case they would not be influenced by any growth in VMT or trips. This emissions estimate would reflect a ceiling on the attainment emissions that should be allowed to occur under the statute as interpreted by the court in *Association of Irrigated Residents* because it shows what would happen under a scenario in which no offsetting TCSs or TCMs have yet been put in place and VMT and trips are held constant during the period from the area's base year to its attainment year. This represents a "VMT offset ceiling" scenario. These two hypothetical status quo estimates are necessary steps in identifying the target level of emissions from which states would determine whether further TCMs or TCSs, beyond those that have been adopted and implemented in reality, would need to be adopted and implemented in order to fully offset any increase in emissions due solely to VMT and trips identified in the "no action" scenario.

Finally, the state would present the emissions that are actually expected to occur in the area's attainment year after taking into account reductions from all enforceable TCSs and TCMs.

This estimate would be based on the VMT and trip levels expected to occur in the attainment year (i.e., the VMT and trip levels from the first estimate) and all of the TCSs and TCMs expected to be in place and for which the SIP will take credit in the area's attainment year, including any TCMs and TCSs put in place since the base year. This represents the "projected actual" attainment year scenario. If this emissions estimate is less than or equal to the emissions ceiling that was established in the second of the attainment year calculations, the TCSs or TCMs for the attainment year would be sufficient to fully offset the identified hypothetical growth in emissions.

If, instead, the estimated projected actual attainment year emissions are still greater than the ceiling which was established in the second of the attainment year emissions calculations, even after accounting for post-baseline year TCSs and TCMs, the state would need to adopt and implement additional TCSs or TCMs to further offset the growth in emissions. The additional TCSs or TCMs would need to bring the actual emissions down to at least the VMT offset ceiling estimated in the second of the attainment year calculations, in order to meet the VMT offset requirement of section 182(d)(1)(A) as interpreted by the Court.

2. Summary of State's Submission

CARB prepared the VMT emissions offset demonstration for the Coachella Valley for the 2008 ozone NAAQS, and the District included it in Chapter 7 of the 2016 AQMP.¹⁰⁹ In addition to the VMT emissions offset demonstration, Appendix VI-E of the 2016 AQMP includes two attachments – one listing the TCSs adopted by CARB since 1990 and another

¹⁰⁹ 2016 AQMP, 7-32.

listing the TCMs developed by SCAG (as of September 2014) in the South Coast. As described above in section III.C.2.b, none of these TCMs apply in the Coachella Valley.¹¹⁰

For the VMT emissions offset demonstration, CARB used EMFAC2014, the latest EPA-approved motor vehicle emissions model for California available at the time the 2016 AQMP was developed.¹¹¹ The EMFAC2014 model estimates the on-road emissions from two combustion processes (i.e., running exhaust and start exhaust) and four evaporative processes (i.e., hot soak, running losses, diurnal losses, and resting losses). The EMFAC2014 model combines trip-based VMT data from the regional transportation planning agency (i.e., SCAG), starts data based on household travel surveys, and vehicle population data from the California Department of Motor Vehicles. These sets of data are combined with corresponding emission rates to calculate emissions.

Emissions from running exhaust, start exhaust, hot soak, and running losses are a function of how much a vehicle is driven. Emissions from these processes are thus directly related to VMT and vehicle trips, and CARB included these emissions in the calculations that provide the basis for the Coachella Valley VMT emissions offset demonstration. CARB did not include emissions from resting loss and diurnal loss processes in the analysis because such emissions are related to vehicle population, not to VMT or vehicle trips, and thus are not part of “any growth in emissions from growth in vehicle miles traveled or numbers of vehicle trips in such area” under CAA section 182(d)(1)(A).

The Coachella Valley VMT emissions offset demonstration uses a 2012 base year. The base year for VMT emissions offset demonstration purposes should generally be the same base

¹¹⁰ Appendix VI-E, Attachments VI-E-1 and 2.

¹¹¹ On August 15, 2019, the EPA approved and announced the availability of EMFAC2017, the latest update to the EMFAC model for use by State and local governments to meet CAA requirements. See 84 FR 41717.

year used for nonattainment planning purposes. In section III.A of this document, the EPA is proposing to approve the 2012 base year inventory for the Coachella Valley for the purposes of the 2008 ozone NAAQS, and thus, CARB's selection of 2012 as the base year for the Coachella Valley VMT emissions offset demonstration for the 2008 ozone NAAQS is appropriate.

The Coachella Valley VMT emissions offset demonstration also includes the previously described three different attainment year scenarios (i.e., no action, VMT offset ceiling, and projected actual). The 2016 AQMP provides a demonstration of attainment of the 2008 ozone NAAQS in the Coachella Valley by the applicable attainment date, based on the controlled 2026 emissions inventory. As described in section III.D of this document, the EPA is proposing to approve the attainment demonstration for the 2008 ozone NAAQS for the Coachella Valley, and thus, we find CARB's selection of year 2026 as the attainment year for the VMT emissions offset demonstration for the 2008 ozone NAAQS to be acceptable.

Table 6 summarizes the relevant distinguishing parameters for each of the emissions scenarios and shows CARB's corresponding VOC emissions estimates for the demonstration for the 2008 ozone NAAQS.

Table 6 - VMT Emissions Offset Inventory Scenarios and Results for 2008 Ozone NAAQS						
Scenario	VMT		Starts		Controls	VOC Emissions
	Year	1000/day	Year	1000/day	Year	tpd
Base Year	2012	11,403	2012	2,007	2012	4.8
No Action	2026	14,977	2026	2,738	2012	3.1
VMT Offset Ceiling	2012	11,403	2012	2,007	2012	2.5
Projected Actual	2026	14,977	2026	2,738	2026	2.0

Source: 2016 AQMP, Tables 7-9 and 7-10.

For the base year scenario, CARB ran the EMFAC2014 model for the 2012 base year using VMT and starts data corresponding to that year. As shown in Table 6, CARB estimates the Coachella Valley VOC emissions at 4.8 tpd in 2012.

For the “no action” scenario, CARB first identified the on-road motor vehicle control programs (i.e., TCSs¹¹²) put in place since the base year and incorporated into EMFAC2014, and then ran EMFAC2014 with the VMT and starts data corresponding to the 2026 attainment year without the emissions reductions from the on-road motor vehicle control programs put in place after the base year. Thus, the no action scenario reflects the hypothetical VOC emissions in the attainment year if CARB had not put in place any additional TCSs after 2012. As shown in Table 6, CARB estimates the “no action” Coachella Valley VOC emissions at 3.1 tpd in 2026.

For the “VMT offset ceiling” scenario, CARB ran the EMFAC2014 model for the attainment year but with VMT and starts data corresponding to base year values. Like the no action scenario, the EMFAC2014 model was adjusted to reflect the VOC emissions levels in the attainment years without the benefits of the post-base-year on-road motor vehicle control programs. Thus, the VMT offset ceiling scenario reflects hypothetical VOC emissions in the Coachella Valley if CARB had not put in place any TCSs after the base year and if there had been no growth in VMT or vehicle trips between the base year and the attainment year.

The hypothetical growth in emissions due to growth in VMT and trips can be determined from the difference between the VOC emissions estimates under the “no action” scenario and the corresponding estimates under the “VMT offset ceiling” scenario. Based on the values in Table

¹¹² As discussed in section III.C.2.b and C.3 of today’s notice, because of the significant influence of pollutant transport from the South Coast Air Basin on ozone conditions in the Coachella Valley, no TCMs are reasonably available for implementation in the Coachella Valley for the purposes of meeting the RACM requirement and neither the District nor CARB rely on implementation of any TCMs in the Coachella Valley to demonstrate implementation of RACM in the 2016 Coachella Valley Ozone SIP. Similarly, no TCMs are included in the VMT emissions offset demonstration for the Coachella Valley.

6, the hypothetical growth in emissions due to growth in VMT and trips in the Coachella Valley would have been 0.6 tpd (i.e., 3.1 tpd minus 2.5 tpd). This hypothetical difference establishes the level of VMT growth-caused emissions that need to be offset by the combination of post-baseline year TCSs and any necessary additional TCSs.

For the “projected actual” scenario calculation, CARB ran the EMFAC2014 model for the attainment year with VMT and starts data at attainment year values and with the full benefits of the relevant post-baseline year motor vehicle control programs. For this scenario, CARB included the emissions benefits from TCSs put in place since the base year. Between 2015 and 2026, VOC emissions from light-duty passenger vehicles in the Coachella Valley are projected to decline an additional 54 percent.¹¹³ The most significant measures reducing VOC emissions during the 2012 to 2026 timeframe include the Advanced Clean Cars program, Zero Emission Vehicle requirements, and more stringent on-board diagnostics requirements.¹¹⁴

As shown in Table 6, the projected actual attainment-year VOC emissions are 2.0 tpd. CARB compared this value against the corresponding VMT offset ceiling value to determine whether additional TCSs or TCMs would need to be adopted and implemented in order to offset any increase in emissions due solely to VMT and trips. Because the projected actual emissions are less than the corresponding VMT offset ceiling emissions, CARB concluded that the demonstration shows compliance with the VMT emissions offset requirement and that the adopted TCSs are sufficient to offset the growth in emissions from the growth in VMT and vehicle trips in the Coachella Valley for the 2008 ozone NAAQS.

¹¹³ Staff Report, ARB Review of the 2016 Air Quality Management Plan for the South Coast Air Basin and Coachella Valley, Release Date: March 7, 2017, Appendix C, Coachella Valley Weight of Evidence, C-9.

¹¹⁴ Attachment V-E-1 to Appendix VI of the 2016 AQMP includes a list of the State’s transportation control strategies adopted by CARB since 1990. Also see EPA final action on CARB mobile source SIP submittals at 81 FR 39424 (June 16, 2016), 82 FR 14446 (March 21, 2017), and 83 FR 23232 (May 18, 2018).

3. The EPA's Review of the State's Submission

Based on our review of Coachella Valley VMT emissions offset demonstration in Chapter 7 of the 2016 AQMP, we find CARB's analysis to be consistent with our August 2012 Guidance and consistent with the emissions and vehicle activity estimates provided by CARB in support of the 2016 AQMP. We agree that CARB and SCAG have adopted sufficient TCSs to offset the growth in emissions from growth in VMT and vehicle trips in the Coachella Valley for the purposes of the 2008 ozone NAAQS. Therefore, we propose to approve the Coachella Valley VMT emissions offset demonstration element of the Coachella Valley Ozone SIP as meeting the requirements of CAA section 182(d)(1)(A).

G. Contingency Measures

1. Statutory and Regulatory Requirements

Under the CAA, SIPs for 8-hour ozone nonattainment areas classified under subpart 2 as Moderate or above must include contingency measures consistent with sections 172(c)(9) and 182(c)(9). Contingency measures are additional controls or measures to be implemented in the event an area fails to make RFP or to attain the NAAQS by the attainment date. The SIP should contain trigger mechanisms for the contingency measures, specify a schedule for implementation, and indicate that the measure will be implemented without significant further action by the state or the EPA.¹¹⁵

Neither the CAA nor the EPA's implementing regulations establish a specific level of emissions reductions that implementation of contingency measures must achieve, but the EPA's 2008 Ozone SRR reiterates the EPA's policy that contingency measures should provide for

¹¹⁵ 70 FR 71612 (November 29, 2005). See also 2008 Ozone SRR, 80 FR 12264, 12285 (March 6, 2015).

emissions reductions approximately equivalent to one year's worth progress, amounting to reductions of 3 percent of the baseline emissions inventory for the nonattainment area.¹¹⁶

It has been the EPA's longstanding interpretation of CAA section 172(c)(9) that states may meet the contingency measure requirement by relying on federal measures (e.g., federal mobile source measures based on the incremental turnover of the motor vehicle fleet each year) and local measures already scheduled for implementation that provide emissions reductions in excess of those needed to provide for RFP or expeditious attainment. The key is that the Act requires that contingency measures provide for additional emissions reductions that are not relied on for RFP or attainment and that are not included in the RFP or attainment demonstrations as meeting part or all of the contingency measure requirements. The purpose of contingency measures is to provide continued emissions reductions while a plan is being revised to meet the missed milestone or attainment date.

The EPA has approved numerous SIPs under this interpretation—i.e., SIPs that use as contingency measures one or more federal or local measures that are in place and provide reductions in excess of the reductions required by the attainment demonstration or RFP plan,¹¹⁷ and there is case law supporting the EPA's interpretation in this regard.¹¹⁸ However, in *Bahr v. EPA*, the Ninth Circuit rejected the EPA's interpretation of CAA section 172(c)(9) as allowing for early implementation of contingency measures.¹¹⁹ The Ninth Circuit concluded that contingency measures must take effect at the time the area fails to make RFP or attain by the

¹¹⁶ 80 FR 12264, 12285 (March 6, 2015).

¹¹⁷ See, e.g., 62 FR 15844 (April 3, 1997) (direct final rule approving an Indiana ozone SIP revision); 62 FR 66279 (December 18, 1997) (final rule approving an Illinois ozone SIP revision); 66 FR 30811 (June 8, 2001) (direct final rule approving a Rhode Island ozone SIP revision); 66 FR 586 (January 3, 2001) (final rule approving District of Columbia, Maryland, and Virginia ozone SIP revisions); and 66 FR 634 (January 3, 2001) (final rule approving a Connecticut ozone SIP revision).

¹¹⁸ See, e.g., *LEAN v. EPA*, 382 F.3d 575 (5th Cir. 2004) (upholding contingency measures that were previously required and implemented where they were in excess of the attainment demonstration and RFP SIP).

¹¹⁹ *Bahr v. EPA*, 836 F.3d at 1235-1237 (9th Cir. 2016).

applicable attainment date, not before.¹²⁰ Thus, within the geographic jurisdiction of the Ninth Circuit, states cannot rely on early-implemented measures to comply with the contingency measure requirements under CAA section 172(c)(9) and 182(c)(9).¹²¹

2. Summary of the State's Submission

The District and CARB had largely completed preparation of the 2016 AQMP prior to the *Bahr v. EPA* decision, and thus, it relies solely upon surplus emissions reductions from already implemented control measures in the milestone and attainment years to demonstrate compliance with the contingency measure requirements of CAA sections 172(c)(9) and 182(c)(9).¹²²

In the 2018 SIP Update, CARB revised the RFP demonstration for the 2008 ozone NAAQS for several districts, including the Coachella Valley, and recalculated the extent of surplus emission reductions (i.e., surplus to meeting the RFP milestone requirement for a given milestone year) in the milestone years. In light of the *Bahr v. EPA* decision, however, the 2018 SIP Update does not rely on the surplus or incremental emissions reductions to comply with the contingency measures requirements of sections 172(c)(9) and 182(c)(9) but, to provide context in which to review contingency measures for the 2008 ozone NAAQS, the 2018 SIP Update documents the extent to which future baseline emissions would provide surplus emissions reductions beyond those required to meet applicable RFP milestones. More specifically, the 2018 SIP Update identifies one year's worth of RFP as approximately 0.5 tpd of VOC and estimates surplus NO_x reductions as ranging from approximately 10.1 tpd to 12.8 tpd depending upon the

¹²⁰ Id. at 1235-1237.

¹²¹ The *Bahr v. EPA* decision involved a challenge to an EPA approval of contingency measures under the general nonattainment area plan provisions for contingency measures in CAA section 172(c)(9), but given the similarity between the statutory language in section 172(c)(9) and the ozone-specific contingency measure provision in section 182(c)(9), we find that the decision affects how both sections of the Act must be interpreted.

¹²² 2016 AQMP, 4-51 and 4-52; Appendix VI-C, pages V-C-1 to V-C-4.

particular RFP milestone year.¹²³ For attainment contingency, the 2018 SIP Update identifies anticipated reductions from the State’s mobile source programs between 2026 and 2027.¹²⁴

To comply with sections 172(c)(9) and 182(c)(9), as interpreted in the *Bahr v. EPA* decision, a state must develop, adopt and submit a contingency measure to be triggered upon a failure to meet RFP milestones or failure to attain the NAAQS by the applicable attainment date regardless of the extent to which already-implemented measures would achieve surplus emissions reductions beyond those necessary to meet RFP milestones and beyond those predicted to achieve attainment of the NAAQS. Therefore, to fully address the contingency measure requirement for the 2008 ozone NAAQS in the Coachella Valley, the District has committed to develop, adopt and submit a contingency measure to CARB in sufficient time to allow CARB to submit the contingency measure as a SIP revision to the EPA within 12 months of the EPA’s final conditional approval of the contingency measure element of the 2016 Coachella Valley Ozone SIP.¹²⁵ The District’s specific commitment is to modify one or more existing rules, or adopt a new rule or rules, to include a more stringent requirement or remove an exemption if the EPA determines that the Coachella Valley nonattainment area has missed an RFP milestone for the 2008 ozone NAAQS. More specifically, the District has identified a list of 8 different rules that the District is reviewing for inclusion of potential contingency provisions. The rules and the types of revisions under review for contingency purposes include, among others: amending existing Rule 1110.2 (“Emissions from Gaseous- and Liquid-Fueled Engines”) to remove exemptions for orchard wind machines powered by internal combustion engines and agricultural stationary engines; amending existing Rule 1134 (“Emissions of Oxides of Nitrogen

¹²³ 2018 SIP Update, tables VII-2 and VII-5.

¹²⁴ 2018 SIP Update, Table VII-6.

¹²⁵ Letter dated August 2, 2019, from Wayne Natri, SCAQMD Executive Officer, to Richard Corey, Executive Officer, CARB.

from Stationary Gas Turbines”) to require more stringent NO_x limits for outer continental shelf turbines and produced gas turbines and/or remove or limit the exemptions for near-limit and low-use turbines; and adopting new Rule 1150.3 (“NO_x Reductions from Combustion Equipment at Landfills”) to require more stringent NO_x limits through use of gas clean-up or other technologies.

CARB has separately committed to adopt and submit the District’s revised rule(s) to the EPA within one year of the EPA’s final action on the contingency measures element of the 2016 Coachella Valley Ozone SIP.¹²⁶

3. The EPA’s Review of the State’s Submission

Sections 172(c)(9) and 182(c)(9) require contingency measures to address potential failure to achieve RFP milestones or failure to attain the NAAQS by the applicable attainment date. For the purposes of evaluating the contingency measure element of the 2016 Coachella Valley Ozone SIP, we find it useful to distinguish between contingency measures to address potential failure to achieve RFP milestones (“RFP contingency measures”) and contingency measures to address potential failure to attain the NAAQS (“attainment contingency measures”).

With respect to the RFP contingency measures requirement, we have reviewed the surplus emissions estimates in each of the RFP milestone years, as shown in the 2018 SIP Update, and find that the calculations are correct. We therefore agree that the 2016 Coachella Valley Ozone SIP provides surplus emissions reductions well beyond those necessary to demonstrate RFP in all of the RFP milestone years. While such surplus emissions reductions in the RFP milestone years do not represent contingency measures themselves, we believe they are

¹²⁶ Letter dated September 9, 2019, from Michael Benjamin, Chief, Air Quality and Science Division, CARB, to Amy Zimpfer, Associate Director, EPA Region IX.

relevant in evaluating the adequacy of RFP contingency measures that are submitted (or will be submitted) to meet the requirements of sections 172(c)(9) and 182(c)(9).

In this case, the District and CARB have committed to develop, adopt, and submit a revised District rule or rules, or a new rule or rules, as an RFP contingency measure within one year of our final action on the 2016 Coachella Valley Ozone SIP. The specific types of revisions the District has committed to make upon an RFP milestone failure, such as increasing the stringency of an existing requirement or removing an exemption, would comply with the requirements in CAA sections 172(c)(9) and 182(c)(9) because they would be undertaken if the area fails to meet an RFP milestone and would take effect without significant further action by the state or the EPA.

Neither the CAA nor the EPA's implementing regulations for the ozone NAAQS establish a specific amount of emissions reductions that implementation of contingency measures must achieve, but we generally expect that contingency measures should provide for emissions reductions approximately equivalent to one year's worth of RFP, which, for ozone, amounts to reductions of 3 percent of the baseline emissions inventory for the nonattainment area. For the 2008 ozone NAAQS in the Coachella Valley, one year's worth of RFP is approximately 0.5 tpd of VOC or 0.9 tpd of NO_x reductions.¹²⁷

In this instance, because of the nature of the District's intended contingency measure (i.e., to modify an existing rule or rules to increase the stringency or to remove an exemption), the District did not quantify the potential additional emission reductions from its contingency measure commitment, but we believe that it is unlikely that the RFP and attainment contingency measures, once adopted and submitted, will in themselves achieve one year's worth of RFP (i.e.,

¹²⁷ The 2011 baseline for NO_x and VOC is 29.8 tpd and 16.9 tpd, respectively, as shown in tables VII-1 and VII-2 of the 2018 SIP Update. Three percent of the baselines is 0.9 tpd of NO_x and 0.5 tpd of VOC, respectively.

0.5 tpd of VOC or 0.9 tpd of NO_x) given the types of rule revisions under consideration and the magnitude of emissions reductions constituting one year's worth of RFP. However, the 2018 SIP Update provides the larger SIP planning context in which to judge the adequacy of the to-be-submitted District contingency measure by calculating the surplus emissions reductions estimated to be achieved in the RFP milestone years and the attainment year. Table VII-2 in the 2018 SIP Update identifies estimates of surplus NO_x reductions in the Coachella Valley for each RFP milestone year. These estimates range from 33.9 percent in milestone year 2017 to 42.9 percent in milestone year 2023.¹²⁸ These values far eclipse one year's worth of RFP (i.e., 3 percent, approximately 0.5 tpd of VOC or 0.9 tpd NO_x) and provide the basis to conclude that the risk of any failure to achieve an RFP milestone for the 2008 ozone NAAQS in the Coachella Valley is very low. The surplus reflects already implemented regulations and is primarily the result of vehicle turnover, which refers to the ongoing replacement by individuals, companies, and government agencies of older, more polluting vehicles and engines with newer vehicles and engines designed to meet more stringent CARB mobile source emission standards. In light of the extent of surplus NO_x emissions reductions in the RFP milestone years, the emissions reductions from the District contingency measure would be sufficient to meet the contingency measure requirements of the CAA with respect to RFP milestones, even though the measure would likely achieve emissions reductions lower than the EPA normally recommends for reductions from such a measure.

For the attainment contingency measure, CARB estimated 0.31 tpd of NO_x and 0.01 tpd VOC surplus reductions in 2027,¹²⁹ which is short of the one year's worth of reductions necessary. We are not proposing action on the attainment contingency measures at this time.

¹²⁸ 2018 SIP Update, Table VII-2.

¹²⁹ 2026 baseline emissions minus 2027 baseline emissions. See 2018 SIP Update, Table VII-6.

Attainment contingency measures are a distinct provision of the CAA that we may act on separately from the attainment requirements.

For these reasons, we propose to approve conditionally the RFP contingency measure element of the 2016 Coachella Valley Ozone SIP as supplemented by commitments from the District and CARB to adopt and submit contingency measures to meet the RFP and attainment contingency measure requirements of CAA sections 172(c)(9) and 182(c)(9). Our proposed approval is conditional because it relies upon commitments to adopt and submit specific enforceable contingency measures (i.e., revised or new District rule or rules with contingent provisions). Conditional approvals are authorized under CAA section 110(k)(4) of the CAA. We are not proposing action on the attainment contingency measure at this time.

H. Motor Vehicle Emissions Budgets for Transportation Conformity

1. Statutory and Regulatory Requirements

Section 176(c) of the CAA requires federal actions in nonattainment and maintenance areas to conform to the SIP's goals of eliminating or reducing the severity and number of violations of the NAAQS and achieving timely attainment of the standards. Conformity to the SIP's goals means that such actions will not: (1) cause or contribute to violations of a NAAQS, (2) worsen the severity of an existing violation, or (3) delay timely attainment of any NAAQS or any interim milestone.

Actions involving Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval are subject to the EPA's transportation conformity rule, codified at 40 CFR part 93, subpart A. Under this rule, metropolitan planning organizations in nonattainment and maintenance areas coordinate with state and local air quality and transportation agencies, the EPA, the FHWA, and the FTA to demonstrate that an area's regional

transportation plans and transportation improvement programs conform to the applicable SIP. This demonstration is typically done by showing that estimated emissions from existing and planned highway and transit systems are less than or equal to the motor vehicle emissions budgets (MVEBs or “budgets”) contained in all control strategy SIPs. Budgets are generally established for specific years and specific pollutants or precursors. Ozone plans should identify budgets for on-road emissions of ozone precursors (NO_x and VOC) in the area for each RFP milestone year and, if the plan demonstrates attainment, the attainment year.¹³⁰

For budgets to be approvable, they must meet, at a minimum, the EPA’s adequacy criteria at 40 CFR 93.118(e)(4). To meet these requirements, the budgets must be consistent with the attainment and RFP requirements and reflect all of the motor vehicle control measures contained in the attainment and RFP demonstrations.¹³¹

The EPA’s process for determining adequacy of a budget consists of three basic steps: (1) providing public notification of a SIP submission; (2) providing the public the opportunity to comment on the budget during a public comment period; and, (3) making a finding of adequacy or inadequacy.¹³²

2. Summary of the State’s Submission

The 2016 AQMP includes budgets for the 2018, 2021, and 2024 RFP milestone years, and a 2026 attainment year. The budgets for 2018, 2021, and 2024 were derived from the 2012 RFP baseline year and the associated RFP milestone years. The budgets are affected by the *South Coast II* decision vacating the alternative baseline year provision, and therefore, the EPA has not

¹³⁰ 40 CFR 93.102(b)(2)(i).

¹³¹ 40 CFR 93.118(e)(4)(iii), (iv) and (v). For more information on the transportation conformity requirements and applicable policies on MVEBs, please visit our transportation conformity web site at: <http://www.epa.gov/otaq/stateresources/transconf/index.htm>.

¹³² 40 CFR 93.118(f)(2).

previously acted on the budgets. In the submittal letters for the 2016 AQMP and the 2018 SIP Update, CARB requested that the EPA limit the duration of our approval of the budgets to last only until the effective date of future EPA adequacy findings for replacement budgets.¹³³ On September 9, 2019, CARB provided further explanation in connection with its request to limit the duration of the approval of the budgets in the 2018 SIP Update.¹³⁴

The 2018 SIP Update revised the RFP demonstration consistent with the *South Coast II* decision (i.e., by using a 2011 RFP baseline year) and identifies new budgets for the Coachella Valley for VOC and NO_x for each updated RFP milestone year through 2026. The budgets in this 2018 SIP Update replace all of the budgets contained in the 2016 AQMP.

Like the budgets in the 2016 AQMP, the budgets in the 2018 SIP Update were calculated using EMFAC2014, the version of CARB's EMFAC model approved by the EPA for estimating emissions from on-road vehicles operating in California at the time the 2016 AQMP and 2018 SIP Update were developed. However, the budgets in the 2018 SIP Update reflect updated VMT estimates from the 2016 RTP/SCS¹³⁵ and are rounded up to the nearest tenth tpd, instead of the nearest whole number. Accordingly, the updated budgets are more precise, and they align with the emissions inventory, RFP and attainment demonstrations in the 2016 AQMP.¹³⁶ The conformity budgets for NO_x and VOC in the 2018 SIP Update for the Coachella Valley are provided in Table 7 below.

¹³³ Letter dated April 27, 2017, from Richard Corey, Executive Officer, CARB, to Alexis Strauss, Acting Regional Administrator, EPA Region IX, and letter dated December 5, 2018, from Richard Corey, Executive Officer, CARB, to Mike Stoker, Regional Administrator, EPA Region IX.

¹³⁴ Letter dated September 9, 2019, from Dr. Michael T. Benjamin, Chief, Air Quality Planning and Science Division, CARB, to Amy Zimpfer, Assistant Director, Air Division, EPA Region IX.

¹³⁵ 2016 RTP/SCS, Amendment 2, adopted by SCAG in July 2017.

¹³⁶ For instance, the 2016 AQMP estimates that 2026 on-road vehicle emissions (summer planning inventory) would be 2.93 tpd for VOC and 4.12 tpd for NO_x. See Appendix A, page A-23 through A-26. The corresponding budgets from the 2018 SIP Update are 3.0 tpd for VOC and 4.2 tpd for NO_x. See Table 5 and surrounding discussion in Section V of the TSD for this action for additional detail.

Table 7 – Transportation Conformity Budgets for the 2008 Ozone NAAQS in the Coachella Valley (summer planning inventory, tpd)		
Budget Year	VOC	NO_x
2020	3.7	8.4
2023	3.3	4.6
2026	3.0	4.2

Source: Table VII-3 of the 2018 SIP Update.

3. The EPA’s Review of the State’s Submission

As part of our review of the approvability of the budgets in the 2018 SIP Update, we have evaluated the budgets using our adequacy criteria in 40 CFR 93.118(e)(4) and (5). We will complete the adequacy review concurrently with our final action on the 2016 Coachella Valley Ozone SIP. The EPA is not required under its transportation conformity rule to find budgets adequate prior to proposing approval of them.¹³⁷ Today, the EPA is announcing that the adequacy process for these budgets begins and the public has 30 days to comment on their adequacy, per the transportation conformity regulation at 40 CFR 93.118(f)(2)(i) and (ii).

As documented in Table 4 of section V of the EPA’s TSD for this proposal, we preliminarily conclude that the budgets in the 2018 SIP Update for the Coachella Valley meet each adequacy criterion. We have completed our detailed review of the 2016 Coachella Valley Ozone SIP and are proposing herein to approve the SIP revision’s attainment and RFP demonstrations. We have also reviewed the budgets in the 2018 SIP Update and found that they are consistent with the attainment and RFP demonstrations for which we are proposing approval, are based on control measures that have already been adopted and implemented, and meet all other applicable statutory and regulatory requirements, including the adequacy criteria in 40 CFR 93.1118(e)(4) and (5). Therefore, we are proposing to approve the 2020, 2023, and 2026 budgets

¹³⁷ Under the transportation conformity regulations, the EPA may review the adequacy of submitted motor vehicle emission budgets simultaneously with the EPA’s approval or disapproval of the submitted implementation plan. 40 CFR 93.118(f)(2).

in the 2018 SIP Update (and shown in Table 7, above). At the point when we finalize our adequacy process or approve the budgets for the 2008 ozone NAAQS in the 2018 SIP Update as proposed (whichever occurs first; note that they could also occur concurrently per 40 CFR 93.118(f)(2)(iii)), then they will replace the budgets that we previously found adequate for use in transportation conformity determinations.¹³⁸

Under our transportation conformity rule, as a general matter, once budgets are approved, they cannot be superseded by revised budgets submitted for the same CAA purpose and the same year(s) addressed by the previously approved SIP submittal until the EPA approves the revised budgets as a SIP revision. In other words, as a general matter, such approved budgets cannot be superseded by revised budgets found adequate, but rather only through approval of the revised budgets, unless the EPA specifies otherwise in its approval of a SIP by limiting the duration of the approval to last only until subsequently submitted budgets are found adequate.¹³⁹

In this instance, CARB has requested that we limit the duration of our approval of the budgets in the 2016 Coachella Valley Ozone SIP only until the effective date of the EPA's adequacy finding for any subsequently submitted budgets, and in September 2019, CARB provided further explanation for its request.¹⁴⁰ Generally, we will consider a state's request to limit an approval of a budget only if the request includes the following elements:¹⁴¹

¹³⁸ We found adequate the budgets from the 2008 Ozone Early Progress Plan for the 1997 ozone NAAQS at 73 FR 25694 (May 7, 2008). The budgets in the 2018 SIP Update for the 2008 ozone NAAQS are lower than the corresponding budgets approved for the 1997 ozone NAAQS. For instance, the current budgets of 7 tpd for VOC and 26 tpd for NO_x for all years, would be replaced by budgets of 3.7 tpd for VOC and 8.4 tpd for NO_x in 2020, and 3.3 tpd for VOC and 4.6 tpd for NO_x in 2023.

¹³⁹ 40 CFR 93.118(e)(1).

¹⁴⁰ CARB's request to limit the duration of the approval of the Coachella Valley ozone MVEB is contained in a letter dated September 9, 2019, from Michael Benjamin, Chief, Air Quality and Science Division, CARB, to Amy Zimpfer, Associate Director, EPA Region IX.

¹⁴¹ 67 FR 69141 (November 15, 2002), limiting our prior approval of MVEB in certain California SIPs.

- An acknowledgement and explanation as to why the budgets under consideration have become outdated or deficient;
- A commitment to update the budgets as part of a comprehensive SIP update; and
- A request that the EPA limit the duration of its approval to the time when new budgets have been found to be adequate for transportation conformity purposes.

CARB's request includes an explanation for why the budgets have become, or will become, outdated or deficient. In short, CARB has requested that we limit the duration of the approval of the budgets in light of the EPA's recent approval of EMFAC2017, an updated version of the model (EMFAC2014) used for the budgets in the 2016 Coachella Valley Ozone SIP.¹⁴² EMFAC2017 updates vehicle mix and emissions data of the previously approved version of the model, EMFAC2014.

Preliminary calculations by CARB indicate that EMFAC2017-derived motor vehicle emissions estimates for the Coachella Valley will exceed the corresponding EMFAC2014-derived budgets in the 2016 Coachella Valley Ozone SIP. In light of the approval of EMFAC2017, CARB explains that the budgets from the 2016 Coachella Valley Ozone SIP, for which we are proposing approval in today's action, will become outdated and will need to be revised using EMFAC2017. In addition, CARB states that, without the ability to replace the budgets using the budget adequacy process, the benefits of using the updated data may not be realized for a year or more after the updated SIP revision (with the EMFAC2017-derived budgets) is submitted, due to the length of the SIP approval process. We find that CARB's

¹⁴² On August 15, 2019, the EPA approved and announced the availability of EMFAC2017, the latest update to the EMFAC model for use by State and local governments to meet CAA requirements. See 84 FR 41717.

explanation for limiting the duration of the approval of the budgets is appropriate and provides us with a reasonable basis on which to limit the duration of the approval of the budgets.

We note that CARB has not committed to update the budgets as part of a comprehensive SIP update, but as a practical matter, CARB must submit a SIP revision that includes updated demonstrations as well as the updated budgets to meet the adequacy criteria in 40 CFR 93.118(e)(4);¹⁴³ and thus, we do not need a specific commitment for such a plan at this time. For the reasons provided above, and in light of CARB's explanation for why the budgets will become outdated and should be replaced upon an adequacy finding for updated budgets, we propose to limit the duration of our approval of the budgets in the 2016 Coachella Valley Ozone SIP until we find revised budgets based on EMFAC2017 to be adequate.

I. Other Clean Air Act Requirements Applicable to Severe Ozone Nonattainment Areas

In addition to the SIP requirements discussed in the previous sections, the CAA includes certain other SIP requirements applicable to Severe ozone nonattainment areas, such as the Coachella Valley. We describe these provisions and their current status below.

1. Enhanced Vehicle Inspection and Maintenance Programs

Section 182(c)(3) of the CAA requires states with ozone nonattainment areas classified under subpart 2 as Serious or above to implement an enhanced motor vehicle I/M program in those areas. The requirements for those programs are provided in CAA section 182(c)(3) and 40 CFR part 51, subpart S.

¹⁴³ Under 40 CFR 93.118(e)(4), the EPA will not find a budget in a submitted SIP to be adequate unless, among other criteria, the budgets, when considered together with all other emissions sources, are consistent with applicable requirements for RFP and attainment. 40 CFR 93.118(e)(4)(iv).

Consistent with the 2008 Ozone SRR, no new I/M programs are currently required for nonattainment areas for the 2008 ozone NAAQS.¹⁴⁴ The EPA previously approved California's I/M program in Coachella Valley as meeting the requirements of the CAA and applicable EPA regulations for enhanced I/M programs.¹⁴⁵

2. New Source Review Rules

Section 182(a)(2)(C) of the CAA requires states to develop SIP revisions containing permit programs for each of its ozone nonattainment areas. The SIP revisions are to include requirements for permits in accordance with CAA sections 172(c)(5) and 173 for the construction and operation of each new or modified major stationary source for VOC and NO_x anywhere in the nonattainment area.¹⁴⁶ The 2008 Ozone SRR includes provisions and guidance for nonattainment new source review (NSR) programs.¹⁴⁷ The EPA has previously approved the District's NSR rules as they apply to Coachella Valley into the SIP based in part on a conclusion that the rules adequately addressed the NSR requirements specific to Severe areas.¹⁴⁸ On December 13, 2018, the EPA approved the District's 2008 ozone certification that its NSR program previously approved into the SIP is adequate to meet the requirements for the 2008 ozone NAAQS.¹⁴⁹

3. Clean Fuels Fleet Program

Sections 182(c)(4)(A) and 246 of the CAA require California to submit to the EPA for approval measures to implement a Clean Fuels Fleet Program in ozone nonattainment areas

¹⁴⁴ 2008 Ozone SRR, 80 FR 12264, at 12283 (March 6, 2015).

¹⁴⁵ 75 FR 38023 (July 1, 2010).

¹⁴⁶ See also CAA section 182(e).

¹⁴⁷ 80 FR 12264 (March 6, 2015).

¹⁴⁸ On December 4, 1996 (61 FR 64291), the EPA approved SCAQMD's NSR rules (the District's Regulation XIII) as satisfying the NSR requirements in title I, part D of the CAA for Extreme (South Coast) and Severe (Coachella Valley) ozone nonattainment areas.

¹⁴⁹ 83 FR 64026 (December 13, 2018).

classified as Serious and above. Section 182(c)(4)(B) of the CAA allows states to opt out of the federal clean-fuel vehicle fleet program by submitting a SIP revision consisting of a program or programs that will result in at least equivalent long-term reductions in ozone precursors and toxic air emissions.

In 1994, CARB submitted a SIP revision to the EPA to opt out of the federal clean-fuel fleet program. The submittal included a demonstration that California's low-emissions vehicle program achieved emissions reductions at least as large as would be achieved by the federal program. The EPA approved the SIP revision to opt out of the federal program on August 27, 1999.¹⁵⁰ There have been no changes to the federal Clean Fuels Fleet program since the EPA approved the California SIP revision to opt out of the federal program, and thus, no corresponding changes to the SIP are required. Thus, we find that the California SIP revision to opt out of the federal program, as approved in 1999, meets the requirements of CAA sections 182(c)(4)(A) and 246 for Coachella Valley for the 2008 ozone NAAQS.

4. Gasoline Vapor Recovery

Section 182(b)(3) of the CAA requires states to submit a SIP revision by November 15, 1992, that requires owners or operators of gasoline dispensing systems to install and operate gasoline vehicle refueling vapor recovery ("Stage II") systems in ozone nonattainment areas classified as Moderate and above. California's ozone nonattainment areas implemented Stage II vapor recovery well before the passage of the CAA Amendments of 1990.¹⁵¹

Section 202(a)(6) of the CAA requires the EPA to promulgate standards requiring motor vehicles to be equipped with onboard refueling vapor recovery (ORVR) systems. The EPA promulgated the first set of ORVR system regulations in 1994 for phased implementation on

¹⁵⁰ 64 FR 46849 (August 27, 1999).

¹⁵¹ General Preamble, 57 FR 13498, 13514 (April 16, 1992).

vehicle manufacturers, and since the end of 2006, essentially all new gasoline-powered light and medium-duty vehicles are ORVR-equipped.¹⁵² Section 202(a)(6) also authorizes the EPA to waive the SIP requirement under CAA section 182(b)(3) for installation of Stage II vapor recovery systems after such time as the EPA determines that ORVR systems are in widespread use throughout the motor vehicle fleet. Effective May 16, 2012, the EPA waived the requirement of CAA section 182(b)(3) for Stage II vapor recovery systems in ozone nonattainment areas regardless of classification.¹⁵³ Thus, a SIP submittal meeting CAA section 182(b)(3) is not required for the 2008 ozone NAAQS.

While a SIP submittal meeting CAA section 182(b)(3) is not required for the 2008 ozone NAAQS, under California state law (i.e., Health and Safety Code section 41954), CARB is required to adopt procedures and performance standards for controlling gasoline emissions from gasoline marketing operations, including transfer and storage operations. State law also authorizes CARB, in cooperation with local air districts, to certify vapor recovery systems, to identify defective equipment and to develop test methods. CARB has adopted numerous revisions to its vapor recovery program regulations and continues to rely on its vapor recovery program to achieve emissions reductions in ozone nonattainment areas in California.

In the Coachella Valley, the installation and operation of CARB-certified vapor recovery equipment is required and enforced by SCAQMD Rules 461 (“Gasoline Transfer and Dispensing”) and 462 (“Organic Liquid Loading”). These rules were most recently approved into the SIP on April 11, 2013, and July 21, 1999, respectively.¹⁵⁴

5. Enhanced Ambient Air Monitoring

¹⁵² 77 FR 28772, at 28774 (May 16, 2012).

¹⁵³ 40 CFR 51.126(b).

¹⁵⁴ 78 FR 21542 and 64 FR 39037.

Section 182(c)(1) of the CAA requires that all ozone nonattainment areas classified as Serious or above implement measures to enhance and improve monitoring for ambient concentrations of ozone, NO_x, and VOC, and to improve monitoring of emissions of NO_x and VOC. The enhanced monitoring network for ozone is referred to as the photochemical assessment monitoring station (PAMS) network. The EPA promulgated final PAMS regulations on February 12, 1993.¹⁵⁵

On November 10, 1993, CARB submitted to the EPA a SIP revision addressing the PAMS network for six ozone nonattainment areas, including the Southeast Desert Modified Air Quality Maintenance Area (SE Desert AQMA), to meet the enhanced monitoring requirements of CAA section 182(c)(1) and the PAMS regulations for the 1979 1-hour ozone NAAQS. The SE Desert AQMA included portions of Los Angeles, Riverside, and San Bernardino counties, including the area that would later be designated as the Riverside County (Coachella Valley) ozone nonattainment area for the 1997 and 2008 ozone NAAQS. The EPA determined that the PAMS SIP revision met all applicable requirements for enhanced monitoring and approved the PAMS submittal into the California SIP.¹⁵⁶

The 2016 AQMP discusses compliance with the CAA section 182(c)(1) enhanced monitoring requirements in terms of the District's "Annual Air Quality Monitoring Network Plan (July 2016)" (ANP).¹⁵⁷ The District's 2016 ANP describes the steps taken to address the requirements of section 182(c)(1), includes descriptions of the PAMS program and provides

¹⁵⁵ 58 FR 8452 (February 12, 1993).

¹⁵⁶ 82 FR 45191 (September 28, 2017).

¹⁵⁷ 2016 AQMP, Table 6-2.

additional details about the PAMS network.¹⁵⁸ The EPA approved the District's PAMS network as part of our annual approval of the District's ANP.¹⁵⁹

Prior to 2006, the EPA's ambient air monitoring regulations in 40 CFR part 58 ("Ambient Air Quality Surveillance") set forth specific SIP requirements (see former 40 CFR 52.20). In 2006, the EPA significantly revised and reorganized 40 CFR part 58.¹⁶⁰ Under revised 40 CFR part 58, SIP revisions are no longer required; rather, compliance with EPA monitoring regulations is established through review of required annual monitoring network plans.¹⁶¹ The 2008 Ozone SRR made no changes to these requirements.¹⁶² Therefore, based on our review and approval of the 2016 ANP for South Coast, including the Coachella Valley, we find that the 2016 Coachella Valley Ozone SIP adequately addresses the enhanced monitoring requirements under CAA section 182(c)(1), and we propose to approve that portion of the plan.

6. CAA Section 185 Fee Program

Sections 182(d)(3) and 185 of the CAA require that the SIP for each Severe and Extreme ozone nonattainment area provide that, if the area fails to attain by its applicable attainment date, each major stationary source of VOC and NO_x located in the area shall pay a fee to the state as a penalty for such failure for each calendar year beginning after the attainment date, until the area

¹⁵⁸ 2016 ANP, 13-15, 28 and Appendix A, 8. Starting in 2007, the EPA's monitoring rules at 71 FR 61236 (October 17, 2006) required the submittal and EPA action on ANPs. SCAQMD's 2016 ANP can be found in the docket for today's action.

¹⁵⁹ Letter dated October 31, 2016, from Gwen Yoshimura, EPA Region IX to Matt Miyasoto, Deputy Executive Officer, SCAQMD, approving the 2016 South Coast ANP.

¹⁶⁰ 71 FR 61236 (October 17, 2006).

¹⁶¹ 40 CFR 58.2(b) now provides "The requirements pertaining to provisions for an air quality surveillance system in the SIP are contained in this part."

¹⁶² The 2008 ozone SRR addresses PAMS-related requirements at 80 FR 12264, at 12291 (March 6, 2015).

is redesignated as an attainment area for ozone. States are not yet required to submit a SIP revision that meets the requirements of CAA section 185 for the 2008 ozone NAAQS.¹⁶³

IV. Proposed Action

For the reasons discussed in this notice, under CAA section 110(k)(3), the EPA is proposing to approve as a revision to the California SIP the following portions of the Final 2016 Air Quality Management Plan submitted by CARB on April 27, 2017, and the 2018 SIP Update submitted on December 5, 2018, that compose the 2016 Coachella Valley Ozone SIP.

- Base year emissions inventory element in the 2016 AQMP as meeting the requirements of CAA sections 172(c)(3) and 182(a)(1) and 40 CFR 51.1115 for the 2008 ozone NAAQS;
- RACM demonstration element in the 2016 AQMP as meeting the requirements of CAA section 172(c)(1) and 40 CFR 51.1112(c) for the 2008 ozone NAAQS;
- Attainment demonstration element for the 2008 ozone NAAQS in the 2016 AQMP as meeting the requirements of CAA section 182(c)(2)(A) and 40 CFR 51.1108;
- ROP demonstration element in the 2016 AQMP as meeting the requirements of CAA 182(b)(1) and 40 CFR 51.1110(a)(2) for the 2008 ozone NAAQS;
- RFP demonstration element in the 2018 SIP Update as meeting the requirements of CAA sections 172(c)(2), 182(b)(1), and 182(c)(2)(B), and 40 CFR 51.1110(a)(2)(ii) for the 2008 ozone NAAQS;

¹⁶³ See 40 CFR 51.1117. For the Coachella Valley, a section 185 SIP revision for the 2008 ozone NAAQS will be due on July 20, 2022.

- VMT emissions offset demonstration element in the 2016 AQMP as meeting the requirements of CAA section 182(d)(1)(A) and 40 CFR 51.1102 for the 2008 ozone NAAQS;
- Motor vehicle emissions budgets in the 2018 SIP Update for the 2020 and 2023 RFP milestone years and the 2026 attainment year (see Table 7) because they are consistent with the RFP and attainment demonstrations for the 2008 ozone NAAQS proposed for approval herein and meet the other criteria in 40 CFR 93.118(e);
- Enhanced vehicle inspection and maintenance program element in the 2016 AQMP as meeting the requirements of CAA section 182(c)(3) and 40 CFR 51.1102 for the 2008 ozone NAAQS;
- Clean fuels fleet program element in the 2016 AQMP as meeting the requirements of CAA sections 182(c)(4)(A) and 246 and 40 CFR 51.1102 for the 2008 ozone NAAQS; and
- Enhanced monitoring element in the 2016 AQMP as meeting the requirements of CAA section 182(c)(1) and 40 CFR 51.1102 for the 2008 ozone NAAQS.¹⁶⁴

With respect to the MVEBs, we are proposing to limit the duration of the approval of the MVEBs to last only until the effective date of the EPA's adequacy finding for any subsequently submitted budgets. We are doing so at CARB's request and in light of the benefits of using EMFAC2017-derived budgets prior to our taking final action on the future SIP revision that includes the updated budgets.

¹⁶⁴ Regarding other applicable requirements for the 2008 ozone NAAQS in the Coachella Valley, the EPA has previously approved SIP revisions that address the nonattainment area requirements for NSR and for implementation of RACT for the South Coast, including the Coachella Valley, for the 2008 ozone NAAQS. See 83 FR 64026 (December 13, 2018) (NSR) and 82 FR 43850 (September 20, 2017) (RACT). SIP revisions for the Coachella Valley addressing the penalty fee requirements under CAA sections 181(b)(4) and 185 are not yet due for the 2008 ozone NAAQS.

We are also proposing that paragraphs (e)(1)(A) and (B), (e)(2), (e)(5) and (e)(8) of District Rule 301 (“Permitting and Associated Fees”), submitted to the EPA on August 5, 2019, and approved on October 1, 2019, at 84 FR 52005, meet the emission statement requirements of CAA section 182(a)(3)(B) and 40 CFR 51.1102 for the 2008 ozone NAAQS.

Lastly, we are proposing, under CAA section 110(k)(4), to conditionally approve the contingency measure element of the Coachella Valley Ozone SIP as meeting the requirements of CAA sections 172(c)(9) and 182(c)(9) for RFP contingency measures. Our proposed approval is based on commitments by the District and CARB to supplement the element through submission, as a SIP revision (within one year of final conditional approval action), of a new or revised District rule or rules that would include a more stringent requirement or would remove an exemption if an RFP milestone is not met.¹⁶⁵ We are not proposing action on the attainment contingency measure at this time.

The EPA is soliciting public comments on the issues discussed in this document. We will accept comments from the public on this proposal for the next 30 days and will consider comments before taking final action.

V. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA’s role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this proposed action merely proposes to approve, or conditionally approve, state plans as meeting federal

¹⁶⁵ Letter dated August 2, 2019, from Wayne Nastri, SCAQMD Executive Officer, to Richard Corey, CARB Executive Officer; and letter dated September 9, 2019, from Michael Benjamin, Chief, Air Quality and Science Division, CARB, to Amy Zimpfer, Associate Director, Air Division, EPA Region IX.

requirements and does not impose additional requirements beyond those imposed by state law.

For that reason, this proposed action:

- Is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and

- Does not provide the EPA with the discretionary authority to address disproportionate human health or environmental effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the proposed rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: December 19, 2019.

Deborah Jordan,
Acting Regional Administrator,
Region IX.

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